Private Support for Universities

by

Richard M. Bird and Meyer W. Bucovetsky

The Commission on the Future Development
of the Universities of Ontario

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Discussion paper prepared for
the Commission on the Future Development
of the Universities of Ontario

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Ontario

The Commission on the
Future Development of the
Universities of Ontario

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TO: Respondents to the Discussion Paper of The Commission on the Future Development of the Universities of Ontario

In February, 1984, the Commission requested Professors Richard Bird and Meyer Bucovetsky of the Institute of Policy Analysis in the University of Toronto to prepare a discussion paper on various issues related to private support for universities in Canada and in Ontario in particular. This study has now been received by the Commission.

Although Professor Bird and Bucovetsky's study was not received in time to make it available prior to the start of the Commission's hearings, enough interest has been expressed in the findings that we felt that they should be made available to those who have responded to the June Discussion Paper published by the Commission.

It is, of course, understood that the study represents the work of Professors Bird and Bucovetsky and the views expressed are not necessarily those of the Commission.

We are making available only a limited supply of this study and would suggest that if your organization requires more than the number received, you should make your own arrangements for providing additional copies.

Edmund C. Bovey
Chairman

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Chapter 1

INTRODUCTION

The terms of reference of the Commission on the Future Development of the Universities of Ontario explicitly require it to consider "... the role of private sector support in the maintenance and enhancement of the physical structures of the system."[1] In its initial discussion paper, the Commission in effect broadened this task. Among the questions it put forth for discussion were two on private support of universities:

> What forms of governmental action through legislation or tax revisions would encourage greater personal or foundation support for universities? What action should universities undertake to increase the level of such private sector support? (Question 43)
>
> What further changes in public funding arrangements would encourage industry-university linkages and industry support of Ontario universities? What actions or arrangements on the part of the universities themselves would facilitate such linkage and support? ... What safeguards would be desirable to protect the integrity of the universities? (Question 42)[2]

The assumptions underlying these questions are, first, that philanthropic contributions to universities "need to be substantially increased". In passing, the Commission implicitly suggested that this task may not be so difficult because "... the level of individual donations to universities in Canada on a per capita basis is dramatically less than in the United States."[3] Secondly, the Commission says, "closer liaison between industry

and the universities and improved support from industry would be in the long-run interest of both, and needs to be strongly encouraged. Furthermore, it would diversify the sources upon which universities are financially dependent."

The aim of the present paper is to provide some background material relevant to these two distinct aspects of private support for universities - unrequited gifts and donations from individuals, corporations, or foundations on the one hand and business support in connection with its "commercial mission"[4] on the other. Although the limited time and resources available for this study have inevitably restricted the breadth and depth of its coverage, we have nevertheless attempted both to set out as clearly as possible the present and potential quantitative importance of both types of private support and also to say at least something about the measures universities (and governments) might take to foster such support, as well as mentioning some of the possible gains and problems from doing so.

The balance of this report consists of four chapters. Chapter 2, on private philanthropy and university finance, explores in some detail the rather unsatisfactory data available on giving in Canada. Incomplete as it is in some respects, this chapter apparently constitutes the most up-to-date and comprehensive general treatment of this subject now available. Chapter 3 then reviews the tax treatment of giving in Canada and considers briefly what might be done to encourage more giving to universities in particular. The final substantive chapter, Chapter 4, is inevitably less thorough (and less quantitative) in

its coverage of the more complex and rapidly-changing area of business-university relations. Nevertheless, even this brief review should help to bring more clearly into focus the possibility and limitations of increasing private "commercial" support of universities. The final brief chapter of the report draws a few general conclusions on the basis of the discussion in the preceding chapters.

Chapter 2

PRIVATE PHILANTHROPY AND UNIVERSITY FINANCE

To understand the present and prospective role of private philanthropy in university finance, we must have a good idea, first, of the dimensions of private philanthropy in Canada - who gives what to whom? - and, secondly, of the current size and nature of private support of Canadian universities. The next two sections are therefore concerned with these two issues. Although the available data are unsatisfactory - even contradictory - in various ways, the general picture set out in these sections is as accurate as possible at the present time.

Given the uncertainties of the Canadian data, international comparisons are obviously even more fraught with difficulties. Nevertheless, since Canadians so often take their cue from what they perceive to be going on south of the border, the final section of this chapter presents some comparisons between the United States and Canada - together with a strong caution not to make too much of any of these numbers!

The Dimensions of Private Philanthropy[5]

This section first reviews the various sources of data available on the size and nature of philanthropic giving in Canada and then attempts to bring these disparate figures together to provide an overview of giving in Canada.

The most readily available source of data on charitable contributions in Canada is the annual Taxation Statistics published by Revenue Canada. As shown in Table 1, in 1981, for example, $1.2 billion in itemized contributions to registered charities were claimed by 1.6 million taxpayers (10.9 per cent of the total number of those filing returns), for an average claim of $738 per claiming return. Over the eleven-year span 1971 to 1981 inclusive the absolute amount of itemized claims grew at a compound annual rate of 15.2 per cent, while the average amount per claimant grew 8.2 per cent annually. In real terms, however, the average itemized contribution actually declined in recent years, for example, from $756 in 1971 (measured in 1981 dollars) to $738 in 1981.[6]

Some interesting additional inferences may be drawn from the available taxation data: for example, that the average charitable contribution per itemizing taxpayer is fairly constant for taxpayers over 35 years of age although the proportion of all taxpayers specifically deducting such contributions rises steadily with age (except for the 65 and over class). More importantly, as shown in Table 2, there are interesting patterns with respect to giving across income classes. In the first place, the proportion of taxpayers itemizing charitable deductions rises steadily with income to a high of 64 per cent in the over $200,000 class. The 0.6 per cent of total itemizers found in this highest income class account for 4 per cent of total gifts, with an average gift size of close to $5,000, compared to $80 for the average itemizing taxpayer. At first

TABLE 1

Individual Charitable Contributions, from Taxation Data, 1961-81

Taxation Year	Returns with Charitable Donation, as Per Cent of Total Returns	Amount of Charitable Donations	Average Claim Per Claiming Return	Amount of Standard Deductions
	(%)	($'000,000)	($)	($'000,000)
1961	N.A.	312.2	N.A.	450.0
1962	N.A.	307.3	N.A.	496.9
1963	N.A.	317.3	N.A.	484.1
1964	N.A.	333.8	N.A.	507.4
1965	N.A.	305.0	N.A.	562.4
1966	N.A.	223.7	N.A.	650.4
1967	N.A.	242.8	N.A.	685.4
1968	12.2	251.1	241	715.5
1969	11.1	259.8	263	763.4
1970	10.0	268.5	292	805.6
1971	9.2	280.8	319	851.1
1972	9.0	345.4	368	933.3
1973	8.2	392.9	432	999.0
1974	8.2	439.7	460	1054.2
1975	8.3	505.6	506	1088.4
1976	8.8	598.7	550	1114.0
1977	9.1	659.5	573	1130.8
1978	8.6	752.2	611	1296.0
1979	9.2	884.8	655	1319.5
1980	10.3	1050.2	689	1309.9
1981	10.9	1216.5	738	1337.0

Source: Revenue Canada, Taxation Statistics, annual.

TABLE 2

The Pattern of Charitable Donations from Tax Data, 1981

Assessed Income Class	Number of Taxfilers	Percent Claiming Charity (%)	Percent of Total Income Claimed (%)	Average Gift per Tax Filer ($)	Percent of Claimant's Income Donated (%)
Loss and nil income	866,514	0.0	0.0	0	0.0
$1-5,000	2,735,947	1.3	0.1	3	8.6
5,000-10,000	2,807,860	6.6	0.4	26	5.4
10,000-15,000	2,473,420	10.2	0.4	53	4.2
15,000-20,000	1,987,640	12.0	0.4	73	3.5
20,000-25,000	1,550,697	14.7	0.5	102	3.1
25,000-30,000	1,054,431	18.1	0.5	127	2.6
30,000-50,000	1,367,621	26.7	0.6	215	2.2
50,000-100,000	284,864	43.9	0.9	554	2.0
100,000-200,000	45,244	56.4	1.1	1,451	2.0
Over $200,000	9,903	63.8	1.4	4,913	2.1
Total	15,179,141	10.9	0.5	80	4.8

Notes: The last column is derived on the assumption that in each income class the average assessed income of those claiming the charitable deduction is equal to the average assessed income of all taxpayers in that class.

Source: Revenue Canada, Taxation Statistics, 1983.

glance, it may appear that higher income Canadians not only give more in absolute terms but also give more relative to income, because the proportion of total income donated rises with income class. In fact, however, closer examination of the data suggests, as shown in Table 2, that this result arises entirely from the increased participation rate. By far the most generous Canadians in relative terms are actually those at the lower rather than those at the higher end of the income scale. The rich as a group give more, not because they give more of what they have, but because they have more to give and more of them give.

One problem with using these taxation figures as an indication of total individual giving in Canada is that any donations made by those claiming the standard deduction (or not filing tax returns) are not included. Another problem is that certain gifts are not included in these figures. In 1979, for example, it may be estimated that another $9 million or so in gifts to the Crown, mostly by high-income individuals, were deducted from income for tax purposes, in addition to the amount shown in Table 1.[7] The average size of these gifts was $2,772 for all taxfilers claiming such donations - 3,270 persons in total - but $23,829 for the 170 taxpayers with over $50,000 in income who accounted for 45 per cent of the total.

A quite different approach to individual giving in Canada is through the periodic sample surveys of family expenditures carried out by Statistics Canada. Two such surveys at the national level have been carried out in recent years, one in 1969

and the other in 1978, in addition to a number of others limited in coverage to a few cities. Table 3 summarizes some of the relevant data. The total individual charity that may be estimated on the basis of this source in 1978 is $1.1 billion, or over $300 million more than the amount of itemized charitable donations claimed for tax purposes in that year (as shown in Table 1). Although both the average size of gifts and the total amount of gifts rose from 1969 to 1978, once again there was almost no change - and indeed even a small decline in average size - once the marked change in price levels over the decade is allowed for. As a proportion of total family income, charitable donations were only 0.7 per cent in 1978 compared to 1.0 per cent in 1969 - and, as shown in Table 3, around three-quarters of this amount went to religious organizations in both years.

Table 4 contains some further information on the nature of individual giving in Canada from the same source. As this table shows, while there is surprisingly little variation by income class in the relative importance of gifts to non-religious charitable organizations, the relative importance of such gifts to all gifts is, as one might expect, larger in higher income groups. Even more strikingly, 26 per cent of all contributions to non-religious organizations came from the relatively few families (9.6 per cent of total) with income over $35,000: their average gift to such organizations, at 0.2 per cent of family income, was no larger relatively than for the lowest income class, but since their income is more than 10 times higher so is their size of their gift at $92 per family, compared to only $8

TABLE 3

Individual Charitable Contributions from Survey Data

Year	Sample	Average Charity Per Family: Total ($)	Religious[b] As % Total	Per Capita Donations[c] ($)	Total Donations ($'000,000)
1964	11 cities	74.80	N.A.	22.67	437.2
1967	11 cities	73.20	N.A.	22.18	452.0
1969A	11 cities	78.50	65	25.74	540.5
1969B	National[a]	81.80	75	24.94	523.7
1972	8 cities	69.00	66	23.08	503.5
1974	14 cities	82.30	71	27.62	617.6
1976	8 cities	104.50	58	36.54	840.1
1978A	16 cities	111.70	69	40.62	953.5
1978B	National[a]	132.30	74	45.15	1060.0

Notes: a) Canada, excluding northern territories.
b) Although there is a slight change in labelling after 1974, it has been assumed here that the two categories distinguished in the surveys - religious or other - are comparable over time.
c) Average family charity divided by average family size.
d) Per capita donations times population.

Source: Statistics Canada (formerly DBS), Urban Family Expenditures 1964, No. 62-527; Urban Family Expenditure 1967, No. 62-530; Family Expenditure in Canada 1969, I and II, Nos. 62-535 and 62-537; Urban Family Expenditure 1972, No. 62-541; Urban Family Expenditure 1974, No. 62-544; Urban Family Expenditure 1976, No. 62-547; Family Expenditure in Canada 1978, vols. II and III, Nos. 62-550 and 62-551.

TABLE 4

Individual Charitable Contributions, by Income Class, and Recipient, 1978

Family Income Class ($)	Contributions as % Income		As Percent Total Contributions	
	Religious	Other	Religious	Other
Under $6,000	1.22	0.19	5.4	2.3
6,000 - 7,999	1.04	0.23	5.3	3.3
8,000 - 11,999	0.66	0.17	7.9	5.8
12,000 - 15,999	0.50	0.16	10.0	9.2
16,000 - 19,999	0.46	0.14	12.4	10.6
20,000 - 24,999	0.47	0.18	16.1	17.6
25,000 - 29,999	0.42	0.18	13.3	15.4
30,000 - 34,999	0.49	0.16	10.4	9.8
35,000 and over	0.42	0.20	19.2	25.8
All classes	0.50	0.18	100.0	100.0

Source: Statistics Canada, Family Expenditures in Canada 1978, Vol. III, No. 62-551.

for the poorest group. The contribution by the average family in Canada was $35 (compared to $97 to religious organizations), ranging from a high of $48 in Saskatchewan to a low of $19 in Quebec. (The Ontario figure was $44.)

Other data in the same source also show considerable constancy in the relative importance of non-religious contributions as between families living in rural areas and those living in large and small urban areas. While not all families made any such gifts 58 per cent reported doing so in 1978, or the same proportion as in 1969. In contrast, the proportions of families reporting contributions to religious organizations fell from 59 to 43 per cent over the same period. On the other hand, those who did contribute to religious organizations actually contributed much more in 1978 than in 1969, raising their average contribution from $103 to $229 (or by 41 per cent in real terms), in contrast to the substantial decline in the real size of their donations to other charitable organization (which rose only 67 per cent in nominal terms, compared to the 86 per cent increase in the CPI over the period). This greater increase in religious than nonreligious contributions holds even in the largest urban areas.

While in principle corporate charitable donations are easier to estimate, in fact there are once again two sources which provide different figures and are not completely consistent, as shown in Table 5. The first column shows the amount of contributions allowed for tax purposes - an amount which is consistently somewhat smaller than the total of such

TABLE 5

Corporate Charitable Donations, 1961-81
($ millions)

Year	Reported for Tax Purposes	Reported in National Accounts
1961	38.1	49
1962	39.8	54
1963	41.7	59
1964	46.2	64
1965	N.A.	68
1966	N.A.	70
1967	N.A.	78
1968	68.8	81
1969	62.6	74
1970	59.7	74
1971	61.3	79
1972	75.4	85
1973	93.2	89
1974	121.9	116
1975	96.5	114
1976	118.4	119
1977	133.7	152
1978	143.8	179
1979	171.0	217
1980	196.1	252
1981	N.A.	224

Sources: Statistics Canada, Corporation Taxation Statistics, Annual, and National Income and Expenditure Accounts, Annual.

contributions recorded in company books.[8] The second column, on the other hand, since it includes such donations as contributions to political parties should generally be an overestimate (although see 1973 and 1974) of the total amount of corporate contributions to charity. A recent estimate that total corporate contributions in 1979 were $214 million (0.52 per cent of pre-tax corporate book profit) is broadly consistent with the expectation that the "correct" number should be between these series.[9] About the only other information available on corporate contributions in Canada comes from surveys (of unknown coverage and reliability) which suggest that on average, about 25 per cent of corporate giving went to education in the 1970s.[10] While an earlier survey suggests that the education share may have fallen from that prevailing in the late 1960s, the comparability of these sources is too suspect to make much of this point.[11]

A final source of funds for many charitable organizations, not least universities, are Canada's foundations, of which there were almost 600 at the beginning of the 1980s. A 1982 publication of the Canadian Centre for Philanthropy reported that in the "most recently available fiscal year" (presumably 1980 or 1981), these foundations gave away grants of some $110.6 million, with almost two-thirds of this amount coming from the 30 largest foundations.[12] Although no numbers are mentioned, this report also noted that the area of greatest interest to foundations is education.[13]

This rather dry and meandering passage through some of the statistical underbrush of Canadian philanthropy may be

appropriately concluded by a brief look at the overall picture. The only published comprehensive recent estimate of total charitable giving in Canada appears to be by the Canadian Centre for Philanthropy, which has estimated that total giving in 1979 was $1,372 million, consisting of $1,058 million in individual giving, $214 million in corporate giving, and $100 million by foundations.[14] Actually, this estimate is almost certainly on the low side, largely because of an apparent mistake in the estimate of individual giving.[15] Table 6 presents three alternative estimates of total giving, all of which are higher. While there is obviously still considerable room for improvement in our estimates also, it would seem on the whole that total Canadian charity in 1979 was at least $1.5 billion and probably higher. Assuming (with no particular warrant) that the average rate of increase of total giving since that year grew by 10% annually, the total amount of giving in 1983 might then have been on the order of $2.2 billion.

Even this figure, however, is considerably less than the figures that may be derived for 1980 on the basis of the financial statements submitted by registered charities to Revenue Canada - shown in Table 6 as Estimate C. Unfortunately, it is difficult to interpret these numbers, let alone to relate them to those presented earlier. In the first place, most public museums and galleries (Crown institutions) are apparently not included in these data. Secondly, the figures shown in Table 6 net out contributions from other charitable organizations, even though to the extent a foundation uses its investment income to support

TABLE 6

Estimates of Total Giving in Canada, 1979 and 1980

	$ millions
Estimate A (1979)	
1. Individuals	$1,207
2. Corporations	214
3. Foundations	100
Total	$1,521
Estimate B (1979)	
1. Individuals	$1,230
2. Corporations	214
3. Foundations	100
Total	$1,544
Estimate C (1980)	
1. Individuals	$1,816
2. Corporations	260
3. Other	229
Total	$2,305

Sources and Notes

A. This estimate follows the methodology of the estimates by the Canadian Centre of Philanthropy cited in the text, correcting some numbers. The numbers for foundations and corporations in both this and Estimate B are, as discussed in the text, taken directly from the CCP work (scaling down the former from the $110 million reported for 1981). The individual figure includes $9 million for gifts to the Crown in both this and estimate B. Other individual giving is estimated

Continued...

Sources and Notes (continued)

A. Continued.

from tax data by adding to total itemized charity ($885 million) an estimate of the average gift by those not itemizing. The latter figure is derived by deducting itemized charitable donations in 1978 ($752 million) from total gifts reported in the 1978 family survey ($1,060 million), and dividing the difference of $308 million by the total number not itemizing charity in 1978 to derive an estimated average gift by non-itemizers of $23.50. The same dollar figure for gifts was then multiplied by the number of non-itemizers in 1979 to estimate the total size of gifts by non-itemizers in that year as $313 million.

B. This estimate of individual giving starts from the 1978 survey total of $1,060 million (Table 3) and assumes this total grew at the average annual rate of increase of itemized giving (i.e. by 15.2%), yielding a total of $1,221 million (excluding gifts to the Crown).

C. These figures come from Statistics Canada, Selected Financial Statistics of Charitable Organizations 1980 (No. 61-519) and are further discussed in the text. Contributions to charitable organizations from other charitable organizations are netted out.

(e.g.) a university, it should be included in the total. However, the numbers in this source on the flows among different charities do not add up.[16] Thirdly, the interpretation of the "other" category - consisting of "fund raising campaigns" ($67 million), bequests ($55 million) and "other" ($107 million) is difficult. Finally, no detailed information on hospitals or teaching institutions (mainly universities) is reported, either in the 1980 survey or in an earlier 1971 survey - which is in any case not comparable to the 1980 survey in respect to the categories tabulated.

Nevertheless, as shown in Table 7, despite these problems the 1980 survey does provide such interesting information as the fact that the apparent propensity of business to give to universities ("teaching institutions") is markedly higher than that of any other identifiable source of funds: 41% of all business giving flowed to teaching institutions (constituting 49% of all the funds they received), compared to less than 4% of individual giving. Applying these proportions to the smaller figures of individual and corporate giving in 1979 reported earlier on the basis of direct estimates, yields an estimate of $134 million in individual and corporate gifts to teaching institutions in 1979, with perhaps another $45 million flowing from other sources for a total of $179 million - or 12% of total giving as reported in Estimate B of Table 6. In contrast, Table 7 suggests that teaching institutions received $216 million in 1980, or less than 8% of total charitable funds in 1980. (Donations to teaching institutions in Ontario alone were $86

TABLE 7

The Flow of Charitable Funds, 1980
($ million)

Source of Funds	Received by: Religious Organizations	Teaching Institutions	Hospitals	Other	Total
Individuals	1,331.4	66.9	41.9	376.1	1,816.3
Businesses	8.0	106.4	4.9	140.4	259.8
Fund-raising Campaigns	20.5	1.6	3.5	41.4	67.0
Bequests	19.7	1.5	3.5	29.8	54.6
Other Charitable Orgs.	269.5	30.1	8.5	222.3	530.3
Other	39.8	9.6	4.0	53.5	106.9
Total	1,689.0	216.1	66.2	863.6	2,834.9
Total, net of other charitable	1,419.5	186.0	57.8	641.3	2,304.6

Note: May not add to totals owing to rounding.

Source: Statistics Canada, Selected Financial Statistics of Charitable Organizations 1980.

million.) This table also shows that 60% of total charitable funds went to religious organizations, with individuals contributing 73% of their total giving to such organizations - a proportion very close to those shown in the family income studies reported earlier.

While the coincidence of these last figures is perhaps encouraging, it is nevertheless difficult to know how to relate these various figures.[17] On the whole, however, it does not seem wildly out of line to conclude that the sundry and confusing data presented in this section suggest that total giving in Canada in 1983 was probably at least $2.2 billion and that somewhere on the order of 10% of this amount - $220 million - probably flowed to teaching institutions (including universities). Most of the gifts to education apparently came from corporations and, less certainly, higher-income individuals. Unfortunately, none of these data permit us to say anything directly about private philanthropy to universities as such.

Private Support for Universities

In these circumstances, why not go directly to the source and work directly with university financial records? Table 8 indicates one reason why not: the donations shown in the university financial statistics compiled by Statistics Canada bear no clear relation to those suggested by the data presented earlier. In 1980/81, for example, all gifts, donations and non-

TABLE 8

Private Sector (Non-Fee) Support of Universities, 1977-80

($ million)

	1977/78	1978/79	1979/80	1980/81
Operating gifts and grants	47.7	59.8	65.3	92.6
Capital gifts	14.2	19.2	10.5	13.4
Total private donations	61.9	79.0	75.8	106.0
As % total expenditure	1.8	2.2	1.9	2.4
Research revenues	62.3	80.6	89.4	92.6
Total private funds	124.2	159.6	165.2	198.6
As % total expenditures	3.7	4.4	4.2	4.5

Source: Statistics Canada, Financial Statistics of Education, annual (No. 81-208).

government grants, other than for sponsored research, amounted to only $106 million, compared to the $216 million received by teaching institutions according to the survey of charitable organizations reported in Table 7.

A possible explanation of this substantial difference is of course that other "teaching institutions" account for the difference - other post-secondary institutions and private schools in particular. Even if all "other" revenue received by private schools - clearly a considerable overestimate of gifts - is added to gifts to universities, however, the total of $172 million still falls well short of that shown in Table 7. If, more reasonably - albeit still arbitrarily - it is assumed that gifts constitute the same proportion (39.3%) of the "other" (non-government, non-fee) income of both private and other post-secondary institutions as of universities, the total estimated gifts to educational institutions in 1980/81 still amount only to $170 million. While still below the total shown in the charitable organization data for (more or less) this year, this figure is actually not far off the total of $179 million estimated indirectly above for 1979. If this coincidence is considered to lend some weight to the earlier conclusions, then perhaps the proportions derived there may be applied to conclude that universities may receive about two-thirds of the total amount of charity flowing to education, with (as noted earlier) probably half this amount coming from the corporate sector.

Several other pieces of the statistical puzzle may usefully be derived from the available data on university finance. In the

first place, as shown in Table 8, universities derive as much or more private sector support directly for their research activities as they do from more philanthropic private donations in general. In total, these data suggest about 4% of the budgets of Canadian universities come from private sources - half for sponsored research and half in the form of unrequited transfers. In the case of Ontario universities in 1980/81, however, both gifts and sponsored research were a bit less important than in the country as a whole. In total, according to this source, Ontario universities received $35 million in gifts ($29 million for operating, $6 million for capital) and $29 million in sponsored research, for a total of 4.1% of total university expenditure from all private sources other than fees.

The quantitative importance and general significance of private support for university research will be discussed further in Chapter 3. For the moment, perhaps the most important conclusion to be drawn from these figures is that if, as suggested above may be the case, perhaps half of the gifts flow from corporations and most of the balance from individuals, then each of these sources probably accounts for at most 1% of university finance in present-day Ontario. A 1973 survey found that most respondents - not least including corporate managers - thought that both corporate and individual donations were far more important sources of finance for higher education than is in fact the case.[18] There is no reason to think that this misperception has dimmed with the years. No matter how one twists the data, however, the simple fact is that neither

corporate nor individual giving is at present significant as a source of university finance, at least in aggregate terms.

The Update campaign of the University of Toronto, for example, which has been called "the most successful approach ever made to the private sector by a university in Canada" raised in total $33.0 million (excluding interest income) over a period of five years.[19] Of this total, 36% came from corporations, 15% from foundations and the balance from individuals, particularly alumni, who accounted for 17% of total receipts. About 70% of the total was restricted in some way. This gigantic five-year campaign produced in total a cash flow equal to only 12% of the $265 million expenditure of the University of Toronto in 1981/82 alone.

In its regular alumni campaign the following year, in 1982, Toronto received some $2.2 million from the 17% of its alumni who contributed, with the size of the average gift being $92. In the same year, Queen's - in the last year of its own special five-year campaign - reported a 20% participation rate, an average gift of $54, and total alumni contributions of $545,000, while Western Ontario reported a participation rate of 10%, an average gift (excluding one very large donation) of around $110 and total alumni contributions of $700,000.[20] In other words, Ontario's three largest and most prestigious universities received about $3.4 million in individual gifts in 1982 - in Toronto's case, only 0.6% of its expenditures in that year. Even at McGill - referred to as "the acknowledged leader in this country both in dollars raised and in percentage of alumni who donate" - this

source of funds provides less than 1% of the total university budget.[21] Moreover, even these figures exaggerate the overall importance of this source of funds in some respects because of the restrictions placed on the use of much of this money.

The point of these numbers is not that Ontario universities cannot and should not do more to raise funds from their alumni and others: they no doubt both can and should, as discussed further below. It is simply that even if half the alumni of the University of Toronto, for example, gave it $100 a year, the University would still receive only about $7 million - or not enough to run either its Faculty of Applied Sciences alone or one of its small suburban campuses. Other universities, with much smaller alumni bodies, obviously have even less possibility of getting significant amounts from this source, even if they may in some rare instances be able to exceed the 25-30% participation rate that is probably the most a large urban university like Toronto could ever realistically hope to achieve. In short, while increasing private sector donations may be an important way in these difficult times to launch (modest) new initiatives or to save particular bits and pieces of universities from financial disaster, this source of funds seems likely to be at most of marginal importance to universities as a whole.

Moreover, while there are indeed some ways developed in the next chapter in which both governments and universities may perhaps increase the flow of individual and corporate donations to universities, it is not at all as clear, as has sometimes been asserted, that this result is necessarily eagerly to be sought.

Not only do both governments and universities have to (so to speak) "spend more to get more", that is, use scarce resources to induce a greater flow of gifts, but gifts - like research funds - seldom come without strings, and not all of the "steering" effects exerted by increased reliance on such funds will necessarily be welcomed either by universities or by society as a whole. The last point is developed a bit more fully later in this report with respect to private support for research. A more appropriate conclusion to the present section is perhaps simply to reiterate that even if the relative importance of private gifts to Ontario universities were, through tremendous efforts, to be doubled in relative terms, they would still provide less than 5% of university finance.

A concerted effort to expand giving to universities ought, nevertheless to have some degree of success - perhaps not this much - in achieving a one-time increment in the flow of resources. As the evidence cited earlier on charitable donations in general suggests, however, universities would find it hard work indeed, given the increasing competition for gifts and the apparent propensity of Canadians to, at best, maintain their level of giving in real terms, to sustain any such increased flow of funds over time, let alone to expand it. At best, a little temporary breathing room, particularly for programs at the expanding edge of the university, may perhaps be achieved through increased efforts in this direction. Little though this may seem, however, without more private sector support, perhaps not even this degree of freedom may be available for universities in Ontario in the immediate future.

U.S. -Canada Comparisons

> These Americans are the most peculiar people in the world. You'll not believe me when I tell you how they behave. In a local community in their country a citizen may conceive of some need which is not being met. What does he do? He goes across the street and discusses it with his neighbor. Then what happens? A committee comes into existence and the committee begins functioning in behalf of that need.
>
> - Alexis de Toqueville (1830)

As a recent report on corporate giving in Europe noted, "cultural heritage and political evolution influence the general attitudes to corporate, as well as personal, responsibility for others."[22] The American tradition of voluntarism described by de Toqueville 150 years ago is still alive and well in that country, more than in any other. In the Netherlands, for example, a recent writer noted that "contributions to philanthropy, education and culture by corporations are made, but they are made without much enthusiasm and with an underlying feeling that the government should be taking care of these things: 'After all, our taxes are high enough.'"[23] Even in the United Kingdom, by far the most philanthropically inclined of the European countries, the corporate contributions reported for 1980 in a small (and almost certainly upwardly-biased) survey amounted on average to only 0.58% of before-tax profits compared to the 1.07% reported for all corporations in U.S. tax data.[24] Another recent

comparison of corporate giving in the U.K. and the U.S. reported quite different figures - 0.2% for the U.K. and 0.5% for the U.S. - but a similar huge gap.[25]

No one, it appears, gives like the Americans. The reasons usually cited for this American peculiarity run from the persistence of the frontier spirit of voluntarism (and distrust of the state) cited by de Toqueville to the (perhaps partly consequent) lesser role of the state in the United States than in other developed countries, in which government as a rule spends much more directly in the traditional philanthropic fields of health, education, and welfare. The larger government presence in these fields means both that there is less need to depend on private sources to finance these activities, and also that - owing to the effect of higher taxes in reducing disposable income - less possibility of doing so in any case.

All these arguments have been put forth before, probably correctly, in an attempt to explain why Canadians appear, on the whole, to be less charitable than Americans.[26] The main point of reiterating these arguments here is simply to emphasize that it is the United States, not Canada, which is unusual in terms of the role of private charity in society, when viewed from an international perspective. The remainder of the present section basically demonstrates that it is quite true that Americans are a more giving people and that American universities are far more dependent on private-sector donations than is the case in Canada. What cannot be done so easily is to determine what significance, if any, these differences have for Ontario universities.

While the U.S. data available on charity and education finance are much richer than those in Canada, they too give rise to similar, if less drastic, problems with respect to comparisons between different sources and consistency over time. Nevertheless, Table 9 provides a useful overview of the recent state of charitable giving in the United States. Over the 1971-81 period as a whole, total charity (as shown in these data) grew in the U.S. at an annual rate of 9.2%, led by corporate giving (at 12.9%): the relative importance of charitable giving, however, actually fell in real terms, since money GNP grew at an average rate of 10.6% over the same period.[27] In terms of U.S.-Canada comparisons, what these numbers suggest is that the size of charity in Canada is indeed much smaller than that in the U.S., but that the relative level of charitable giving not only seems to be holding its own north of the border but may even be growing a bit faster than in the United States.

Converting the estimates of the size of charitable giving in Canada in Table 6 into per capita terms and as a percentage of GNP, giving in Canada in 1979 appears to have accounted for 0.6% to 0.8% of GNP, or from $65 to $96 per capita. The comparable American figures for the same year were 1.8% of GNP and $193 per capita. The level of charity in Canada thus appears to lie somewhere in the vicinity of one-third to one-half that in the United States. Individual giving in the United States in 1978, for example, accounted for 1.9% of personal income, compared to 0.7% in Canada in the same year. Similarly, corporate giving in Canada in 1979 was 0.52% of pretax profits, compared to 0.91% in the United States.[28]

TABLE 9

Annual Charitable Contributions in the U.S., 1982

($ billion)

Sources of Contributions		As % total
Individuals	$48.7	80.6
Bequests	5.4	8.9
Foundations	3.2	5.3
Corporations	3.1	5.1
	$60.4	100.0

Recipients		
Religion	$28.1	46.5
Education	8.6	14.2
Social Services	6.3	10.4
Health, hospitals	8.4	13.9
Arts, humanities	5.0	8.3
Civic, public affairs	1.7	2.8
Other	2.4	4.0
	$60.4	100.0

Note: May not add to totals owing to rounding.

Source: Giving U.S.A. (New York: American Association of Fund-Raising Counsel, Inc., 1983).

At the same time, however, while the evidence on trends in Canadian charity over time is sparse and difficult to interpret, it appears that both individual and corporate giving have been growing at least as fast in Canada as in the U.S.; more conjecturally, the same is true of total giving as well. According to tax data, for example, itemized charitable contributions grew at a compounded annual rate of 15.2% in the 1971-81 period compared to 10.2% for individual charity in the U.S. over the same period. Tax-deductible corporate charity in Canada grew at 12.1% annually in 1971-81 compared to 12.9% for U.S. corporate charity in 1971-81. Finally, and somewhat whimsically, if our earlier 1971 estimate of total giving in Canada as $749 million is assumed to be correct and total Canadian charity is assumed to have grown at the same rate as in the U.S., the total for Canada in 1979 would have been $1,519 million - or almost identical to the lowest estimate of the Canadian total presented in Table 6 above.

Table 10 compares apples and oranges in the sense of using quite different data sources to obtain some idea of the composition of the recipients of charity in Canada and the United States. Despite the difficulties of comparing these figures, it is probably correct to conclude from this table that Canadians give relatively more to religious institutions and relatively less to health and education than do Americans. The latter part of this conclusion also emerges clearly from a look at American data on educational finance.

TABLE 10

Distribution of Charity by Recipient, U.S.A. and Canada, 1980

(per cent)

Type of Recipient	Canada	U.S.A.
Welfare; social services	13.9	10.0
Heath and hospitals	11.3	13.7
Education	10.6	14.1
Religion	59.6	46.0
Community; civic and public affairs	2.9	2.8
Other	1.7	13.4
Total	100.0	100.0

Notes: Where two categories are shown in a row, the first refers to the Canadian classification and the second to the American. In the case of welfare, the Canadian figures are inflated because this category includes federated charity dries which are in turn contributors to other charities: the Canadian figures are in part slightly double-counted because it was not possible to separate out funds transferred b) hospitals and education to other charities.

Sources: Statistics Canada, Selected Financial Statistics of Charitable Organizations 1980; Giving U.S.A., 1983.

In 1979-80, for example, private gifts and grants accounted for 4.8% of the operating income of all U.S. institutions of higher education.[29] The roughly comparable Canadian figure for 1980-81 was 2.9%.[30] Aggregate U.S. figures are considerably distorted, however, by the existence of an important group of independent universities and colleges, for which there is no Canadian equivalent. In 1979, for example, these independent institutions (which accounted for 31% of all spending on higher education in the U.S.) received 20% of their total revenue from private gifts and grants - more than the 19% they received in government grants and contracts (or the miniscule 2% in direct government support). In contrast, public universities and colleges in the U.S. received only 4% of their revenue from private gifts, with 15% coming from government grants and contracts, and 59% directly from governments.[31] As closely as can be estimated, the comparable 1979 figures for Canadian universities were 2% for private gifts and grants, 10% for government research grants and contracts, and 69% for direct government support. In other words, Canadian universities as a whole probably depend only half as much for funding on private gifts as do U.S. public universities: more importantly, perhaps, in neither case is the total of such gifts large relative to total financial needs.[32]

A final, more inferential, conclusion on private support for universities may perhaps be derived from the earlier discussion on the relative level of charitable giving in the two countries. It seems clear that Canadians give less to

universities than do Americans, measured in any way one wishes. When the independent sector is removed from the U.S. educational universe, however, the size of the remaining difference appears to reflect as much the generally lower level of charitable contributions in Canada for all purposes as it does any particular Canadian bias against giving to universities. The oft-cited difference between the rabidly loyal "football alumni" of the large U.S. state universities and their passive Canadian counterparts may, it appears, be a less important factor in explaining the relatively low degree of philanthropic support for Canadian universities than the more general political and cultural factors that make Canadians on the whole appear to be superficially less charitable than their U.S. neighbours - if not notably less so than anyone else in the world. Higher taxes, lower disposable incomes, and different social traditions are probably at least as significant in explaining Canada's "poor" performance as any lack of effort by Canadian universities to encourage giving.

Chapter 3

ENCOURAGING PRIVATE PHILANTHROPY

The previous chapter suggested both that Canadians give less than Americans owing largely to fairly deep-rooted cultural and political factors and that the size and nature of the philanthropic sector (in both countries) has changed only slowly over time. If one wanted to encourage private philanthropy in Canada further, however, how best might this goal be achieved? With respect to philanthropy, as with respect to so many other public policy aims, it appears that one answer which springs immediately to mind is to provide bigger and better tax incentives. At different times, for example, proposals have been made in Canada to permit the deduction from taxable income of 125% of charitable deductions,[33] to repeal the upper limit on charitable deductions, and to introduce a floor,[34] to exempt gifts of appreciated property to charities from the deemed disposition rule which currently subjects them to capital gains tax,[35] and, most notably, to replace the charitable deduction by a credit.[36] All of these measures are presumably intended to encourage charitable giving. The first section of the present chapter therefore reviews briefly the existing tax provisions affecting philanthropy and educational financing in general in order to provide the background needed to understand such proposed changes. The second section of the chapter then reviews the literature on the probable effectiveness and effects of

various tax incentives for charitable giving and concludes with a few comments on possible measures that might be taken by the universities themselves to encourage private philanthropy.

Tax Aspects of Philanthropy[37]

This section first outlines the present system of tax relief for donors, with particular attention to the complex questions surrounding gifts of property rather than cash. A brief review of the tax treatment of universities as recipients of charity is then followed by a sketch of a few other tax measures related to education which affect university finance. (The taxation aspects of privately-sponsored university research and development are considered in the next chapter.)

A Canadian taxpayer, individual or corporation, who makes a donation to a qualifying institution may ordinarily deduct the amount of the gift from the income that would otherwise be subject to tax. In effect, then, the price of giving a dollar's worth of charity is, for most Canadians, less than one dollar. To be precise, the "price" of charity is the percentage of a dollar represented by one hundred minus the taxpayer's marginal tax rate. A taxpayer whose marginal rate is 55% can give away a dollar at a real cost to himself of only 45 cents, while a lower-income taxpayer, with a marginal rate of, say 20%, must pay 80 cents out of his own pocket to give a dollar to the same institution.

The taxpayer must, however, have met two general requirements in order to claim this deduction. First, the gifted amount must be substantiated by a receipt from the qualifying institution appended to his tax return. Secondly, the total of charitable claims made in a year must not exceed 20 per cent of net income (before personal exemptions). Before 1981, charitable claims exceeding the limit in any year could be carried over only to the immediately following year. Now, however, the carry-forward period has been lengthened to five years for living taxpayers. Moreover, in the year of a taxpayer's death, his estate is allowed a one-year carry-back of any donations that exceed that year's 20 per cent limit.[38] With respect to gifts made to the federal or provincial governments or their agencies, however, taxpayers may deduct any gifted amount up to 100 per cent of income. Since 1981, such gifts to the Crown may also be carried forward five years, if they exceed the taxpayer's current income.

Instead of supplying itemized receipts of charitable contributions, until 1983 taxpayers could avail themselves of the option of taking a $100. "standard" deduction in lieu of substantiated claims for medical expenses and charitable donations. The $100. standard deduction could be claimed, however, in addition to the tax benefits of a gift of any amount to the federal or provincial governments and their agencies. Since only those itemized medical expenses that exceed 3 per cent of net income are tax-deductible, for most Canadian taxpayers the choice between itemization and standard deduction depended only

upon whether or not receipted charitable donations had in fact exceeded $100. The result is that for small givers the price of a dollar of charity was a full dollar, a result which many argued had the effect of dampening the philanthropic fervour of small contributors. This option was foreclosed, however, effective this year. The elimination of the standard deduction was, interestingly, subjected to criticism by many of those who had advocated this very step, on the grounds that it should have been accompanied by the conversion of the itemized deduction to a 50 per cent tax credit.[39]

The general tax relief for charitable donations sketched above extends in principle to gifts in kind as well as to gifts of cash since Revenue Canada defines a gift as "a voluntary and gratuitous transfer of real or personal property" (Interpretation Bulletin IT-297R). However, the same Bulletin goes on to note that a gift of services is in fact not an acceptable gift in kind. Other donations that have been determined to be ineligible are used clothing or furniture and merchandise whose cost has been accounted to business expense by the donor. Other gifts in kind to qualifying donees may, however, el[illegible]t receipts entitling them to deduction at their fair market value as determined by a competent evaluator.

The catch in this procedure is that as a general rule, the fair market value of a gifted asset is also regarded as the proceeds of a deemed realization for purposes of capital gains tax (and recaptured capital cost allowance). Giving a non-cash valuable to charity is thus in many cases a two-edged sword: it

may precipitate tax obligations upon the donor as well as shower him with tax relief. This presumably unpleasant result ensues if the gifted property is tax-depreciated and/or its fair market value on disposal exceeds its cost basis. The donor would then, in the first case, be liable for tax at full rates on recaptured capital cost allowances, and, in the second, for tax on half of the deemed capital gain. Gifts of appreciated equity shares, for example, will trigger a taxable gain in exactly the same way as if the shares had been sold. Nevertheless, provided that total gifts in a year do not exceed 20 per cent of the donor's (enhanced) income - an event which happens rarely - immediate tax relief in respect of the donation will still exceed any tax exacted on the gain.

There are two exceptions to these general rules, both of which affect primarily gifts of appreciated artistic, cultural, bibliographic and similar movable tangible property. When capital gains were first subjected to tax, no distinction was made among qualifying gifted assets. Both before and after enactment of the 1971 Income Tax Act, however, Canadian museums and galleries pressed vigorously for preferential tax treatment of gifts-in-kind donated to their collections. In particular, they argued that Canadian institutions would lose out to their United States "competitors" who were able to confer enticing tax concessions on their benefactors. Those galleries not classed as government agencies further complained of the discriminatory impact on potential gifts to non-Crown institutions of the 20 per cent of income limitation.

These representations soon resulted in a 1973 exception to the general rules respecting gifts of property with respect to gifts of tangible capital property that has appreciated in value and that may "reasonably be regarded as being suitable for use by the donee directly in the course of carrying on its charitable, public service or similar activities." Examples of the kind of gift to which the amendment applies are a gift of an art collection to a public art gallery or a gift of land to be used for a camp or a hospital (cited in Interpretation Bulletin IT-288). Specifically excluded, however, is incorporeal property such as stocks, bonds or franchises. For eligible gifts, the donor may designate any value of his own choice between the adjusted cost base of the asset and its fair market value. The amount chosen is then regarded as the value of the property in respect of both the charitable deduction and the taxable capital gain. What this amendment in effect does is thus to enhance the incentive to donate appreciated qualifying property when the donor would otherwise have encountered the deduction limit.[40]

This provision, however, is now dominated in most instances by that stemming from the later Cultural Property Export and Import Act (discussed below). Where either provision may be applied, it always pays to choose the latter. Either provision might, for example, be invoked in principle in respect to an artistic object or the memorabilia of a celebrity given to a non-Crown-owned gallery; in practice, the value choice option described above is now redundant. There are other instances, however - such as land or buildings for the direct use of the

recipient institution - where the value choice option still has operational significance.

A second and far more significant exception to the general rules respecting gifts of property took effect in 1977 as a result of the Cultural Property Export and Import Act. This Act conferred two extremely generous tax benefits upon the donors of qualifying gifts-in-kind. In the first place, any deemed capital gain on appreciated property was totally exempt from taxation (although any deemed capital loss was still deductible). Secondly, the tax deductibility of the fair market value of the gift was exempted from the 20 per cent of income limitation: whether or not the recipient is an agent of the Crown, a gift qualifying under this legislation may offset any amount of the donor's current income otherwise subject to tax. (As with all donations, the carry-forward of unused deductions has recently been extended to five years.) Originally, these provisions applied only to inter vivos gifts (or sales), but in 1981 the coverage was extended retroactively to 1977 to include gifts by will.

To qualify for these two tax preferences, the donated object must have been certified as having cultural importance to Canada, and it must also have been donated to a specific designated "institution or public authority".[41] Certifying the credentials and value of such property is the responsibility of an appointed Cultural Property Export Review Board, while establishing the eligibility of the recipient is the responsibility of the Minister of Communications. In all cases

the receiving institution must be "public" in the sense of being non-profit and with an accessible collection, although it need not be owned by a public body.[42] Appropriate recipients fall into one of two categories. Category A entities are those authorized indefinitely to collect certified property in general; Category B entities are authorized for purposes of a particular transaction. By the end of the 1982-83 fiscal year there were 151 Category A designated institutions. Fourteen entities were granted Category B status during the 1982-83 year. Although universities as such are not Category A designated institutions, most major university libraries, archives, and art galleries have been so designated. Moreover, universities frequently have been granted Category B status with respect to particular transactions (e.g., Toronto and McMaster in 1982-83).

In principle, the value that the Board certifies and transmits to Revenue Canada is the fair market value of the asset at the time of disposition. In practice, of course, the objective value of art and artifacts is frequently very difficult to establish, leaving considerable room for collusion between donor and donee. One legislated deterrent to abuse is a special 30 per cent tax imposed on a receiving institution if it disposes of a certified property within five years of certification (unless disposition is to another designated entity). Problems have nevertheless arisen concerning objects that are purchased by a taxpayer and immediately given to a designated institution, with an appraised value greatly in excess of the purchase price. Indeed, there are unsubstantiated stories of Crown-owned

exhibiting institutions attempting to overcome their limited acquisition budgets by offering inflated evaluations to entice private purchase and immediate donation of items desired by the institution. Whatever the truth of such stories, in its 1982-83 Report the Board declared that in such cases the fair market value for tax purposes will be presumed to be the purchase price.[43]

An issue with which the Board apparently has greater sympathy involves gifts by artists of their own work. Since such property was presumably created with the object of being sold, its donation is regarded as coming out of inventory whose value must be accounted in income. On the other hand, if an artist (or politician) can persuade a designated institution - and the Board - that his personal papers have national significance, their donation could bring him the tax advantages of the Cultural Property Act.

In 1982-83, 674 applications to transfer $21.6 million in property ($20.5 million in gifts, $1.1 million in sales) were approved by the Board. The average size of gift was therefore around $32,000, compared to $33,000 in 1981-82 and $55,000 in 1980-81. In total, some $46 million in property (including $41 million in donations) was transferred under this Act in these three years.[44] As in the case of the gifts to the Crown discussed briefly in Chapter 2 above, and indeed, probably even more so, it seems clear that most of these gifts came from well-off individuals.

Turning to the question of what organization, other than Crown institutions and Category A institutions designated by the Cultural Property Export Review Board, are eligible to confer tax relief upon their benefactors, there are actually seven other categories of eligible recipients. The only important one, however, is really registered charities, which includes a subcategory, charitable organizations, which in turn embraces Canadian universities.[45]

It has always been the case that, in order to issue eligible receipts to donors, a charity had to be registered with the Department of National Revenue. Moreover, since 1976, in order for charities themselves to be exempt from income tax they must be registered. To be registered, applicants must meet certain common law tests of charitable purpose (summarized in Revenue Canada, Information Circular No. 80-10).

Registered charities are classified as either charitable organizations, public foundations, or private foundations. The first, and much the larger, of these sub-categories includes those institutions (incorporated or unincorporated) that themselves directly engage in approved altruistic activities. Universities are viewed as charitable organizations; so too are religious congregations, hospitals, health research societies, arts councils, poverty relief institutions, and so on. If, on the other hand, an organization's charitable activity is mainly that of distributing funds for laudable purposes to be performed by others, it is classed as a charitable foundation. A public foundation is a charitable foundation half or more of whose

directors or trustees deal with each other "at arm's length", and three-quarters or less of whose capital was contributed by one person or a "non-arm's-length" group. Lastly, a private foundation is a charitable foundation that is not a public foundation.

A registered charity must fulfill two obligations: it must file annual returns with Revenue Canada, and it must annually dispose of a prescribed quota of funds. Since 1978, "charitable organizations" have been obliged to expend at least 80 per cent of their receipted donations from the previous year on appropriate charitable activities. Stricter rules apply to foundations.[46]

An issue that has continued to bedevil the treatment of tax-exempt Canadian charities is the possible abuse of charity status for purposes of personal tax avoidance. Most recently, a federal Discussion Paper of May 1983 proposed eliminating the distinction between charitable organizations and charitable foundations and requiring all registered charities to make a minimum annual distribution of 80 per cent of all gifts received plus 4.5 per cent of the value of investments. These proposals received a universally hostile reception. The Association of Universities and Colleges of Canada, for example, argued that the proposed changes would unduly hamper university fund-raising activities and add to their cost.[47]

In response to such criticisms, a compromise approach was embodied in the February 1984 Budget under which both the existing three-way categorization of registered charities and the

disbursement rules for charitable organizations will remain as they were (that is, expenditure of 80 per cent of the prior year's receipted donations). Tighter rules will, however, be applied to foundations, particularly private foundations.

Actually, the constraints on registered charities were lightened in 1984 in at least three respects. First, the period for filing returns after a fiscal year was extended from three to six months. Secondly, a carryover in respect to meeting future years' disbursement quotas will now be allowed to the extent that any one year's obligations have been exceeded. Finally, and most significantly, endowments for periods of ten years or more (as well as testamentary gifts out of the capital of an estate) received after 1982 will no longer be treated as "receipted donations" for purposes of calculating a charity's disbursement quota.

In addition to the provisions affecting charitable donors and recipients described above, there are a number of other tax provisions that have implications for university finance. In terms of amounts claimed and numbers of claimants, the foremost such provision is the deduction of tuition fees from students' income, a deduction which has existed since the early 1960s. Deductible fees are those that are appropriately documented and cover explicitly academic purposes (excluding, for example, social or athletic fees). The cost of books is also normally excluded.

At present, any student, whether part-time or full-time, may deduct all tuition fees paid to a very broad range of

Canadian educational institutions (secondary, post-secondary, vocational), provided the fees exceed $100. Canadian resident students commuting to attend post-secondary courses in the United States may also deduct all fees in excess of $100. Canadian students may also deduct the fees paid to a foreign university, provided they are in full-time attendance for 13 weeks or more at a course leading to a degree.

The major restriction on this deduction is that it is only claimable against the student's own taxable income. Even if paid by parents, for example, fees may be deducted from the student's income if he has otherwise-taxable income. Some corporations refund tuition fees to employees: in such a case the student's income is normally increased by the amount of the refunded fees but this increase is of course offset by his ability to deduct the fees; in addition, the corporation normally can also deduct these payments from its taxable income. Moreover, if the fees are incurred for the benefit of the employer - e.g., he gives time off from work to take the course - then there may be no taxable benefit imputed to the employee in the first place.

In addition to the deduction of tuition fees, a special "education deduction" has been available since 1972. The amount deductible is fifty dollars for each month during which a student was in full-time pursuit of an appropriate program of study, defined as one extending for at least three weeks and involving at least ten hours a week of student participation. In contrast to the tuition fee deduction, however, which (except for fees paid by employers) cannot be deducted by anyone other than the

student, if a student does not have sufficient taxable income to absorb his education deduction, any excess (beyond the amount required to reduce the student's taxable income to zero) may be claimed by such "supporting individuals" as a spouse, parent, or other relative.[48]

Another income tax provision respecting education dating from 1972 is the opportunity for a taxpayer to contribute to a Registered Education Savings Plan (RESP) in order to finance his child's (or some other specified person's) future education. Although contributions into a RESP trust are not tax deductible, the income of such a trust is not taxable in the hands of the subscribing taxpayer. The income earnings of the trust are ultimately taxable in the hands of the beneficiary when the trust is liquidated for the purpose of his education. As a Finance Canada study put it a few years ago: "Thus, preferential treatment arises both in the deferral of tax on the investment return and in having this return taxed at the beneficiary/student's typically lower marginal rate of tax".[49]

A final income tax provision concerning education that should be mentioned here is the treatment of scholarships, fellowships and bursaries (defined in Interpretation Bulletin IT-75R2). The first $500 of such awards is exempt from income tax. This treatment may not always represent a tax advantage to the recipient, however. A graduate or post-doctoral student, for example, may receive funding which may be described either as a fellowship or as a research grant. In Revenue Canada's view, the distinction between these two turns on whether the primary

purpose of the funding is the furtherance of the recipient's education and training, or research for its own sake - an arbitrary judgment at best. Yet, the tax difference may be considerable. Expenses paid out of a research grant (such as travel) serve to reduce the amount of the award that is taxable. Treated as a fellowship, however, the amount awarded in excess of $500 is fully taxable, regardless of expenses.[50]

In 1980, the federal government estimated that the non-taxation of this $500 amount cost it $5 million in revenues forgone, compared to a cost of $30 million for the education deduction, and $34 million for the tuition deduction. If we assume, probably not too misleadingly, that most of these amounts pertained to post-secondary students, this hidden "matching grant" of $69 million was a not insignificant federal subsidy to the $526 million of post-secondary tuition fees in 1980-81 - and, indeed, probably exceeded the educational share of the tax "subsidy" extended through the charitable deduction.[51]

Prospects for Increased Support

This section first reviews the little that is known about the effectiveness and effects of tax incentives for charitable giving and then considers briefly some possible ways in which governments, and universities themselves, may be able to increase the flow of private gifts, bequests, and grants to universities.

Over the last decade a number of empirical studies of the effects of income tax incentives on charitable giving by individuals have been carried out, primarily, of course, in the United States but with a lone example in Canada.[52] Since most of these studies have recently been expertly surveyed by Professor James Johnson of McMaster University, the next few paragraphs draw heavily on his work.[53]

As Johnson notes, the income tax affects contributions both through an "income effect" (because the tax reduces disposable income and hence most expenditures, including those on charity) and through a "price effect" (because, as noted earlier, the deductibility of contributions reduces the "price" of giving relative to the price of other, non-deductible, expenditures). Most empirical studies of taxes and giving have attempted to estimate the size of these price and income effects, assuming that people in effect "demand" the services of charitable organizations in the same way that they demand food, automobile repairs, or movie tickets. In other words, the amount people give to charity, like the amount they spend on hot dogs, is assumed to depend upon their income, the price of charity relative to other goods and services, and perhaps also on such other factors as age and place of residence. The empirical studies then estimate statistically the relationship between contributions and these variables on the basis of tax or survey data, paying particular attention to the responsiveness of contributions to changes in income and price as measured by income and price elasticities. The greater these computed

elasticities (measured as the percentage change in contributions divided by the percentage change in income or price), the more responsive contributions are to changes in incomes or price. Price elasticity measures are particularly important in considering the effects of taxes on charitable giving because, as already mentioned, the "price" of giving is directly related to the marginal tax rate.

Table 11 summarizes the results of 10 such studies in recent years. The first nine studies all relate to the United States, commencing with the first such study by Tanssig in 1967 and concluding with a more sophisticated study of Clotfelter in 1980. The huge range in these estimates - from Tanssig's price elasticity of 0.1 to Dye's of 2.5, for example - does not at first glance inspire much confidence. Most economists, however, would probably feel fairly comfortable with the conclusion of the most recent Clotfelter study, namely, that while the short-run responsiveness to changes in the "price" of charity (e.g. through tax changes) is probably quite low, over the longer run changes in the tax treatment of charitable contributions will probably induce a substantial increase in the flow of such contributions.[54]

The only published Canadian study (by Hood, Martin, and Osberg) essentially applied the method used by Feldstein in 1975 to 1968-73 data from Taxation Statistics. This study found a much lower income elasticity than did Feldstein for the U.S. or than Clotfelter's "long run" estimate. Unlike most of the U.S. studies cited, however, this study was not based on a sample of

TABLE 11

Estimated Response of Charitable Donations to Price and Income Changes

Study	Price Elasticity	Income Elasticity
Taussig (1967)	0.1	2.0
Schwartz (1970)	0.7	0.8
Feldstein (1975)	1.2	0.8
Feldstein and Clotfelter (1976)	1.6	0.8
Feldstein and Taylor (1976)	1.4	0.8
Boskin and Feldstein (1977)	2.5	0.7
Dye (1977)	2.5	0.5
Reece (1979)	1.0	1.4
Clotfelter (1980) - long run	1.4	0.5
- short run	0.4	0.4
Hood, Martin, and Osberg (1977)	0.6	0.5

Note: In some instances these values are rough averages of the several estimates presented. Full citations of the various papers may be found in the source. All estimates except the last row are for the U.S.

Source: J.A. Johnson, "The Determinants of Charitable Giving with Special Emphasis on the Income Deduction under the Income Tax - A Survey of the Empirical Literature", Working Paper No. 82-29, Department of Economics, McMaster University, August 1982.

individuals but on published aggregate data.[55] Both the weight that should be attached to this lone study and its comparability with the various U.S. studies are thus not clear. Nevertheless, for what they are worth, these results suggest both that the proportion of income given to charity will fall over time as incomes rise and, in contrast to most U.S. studies, that relatively little stimulus to contributions results from their deductibility for tax purposes. This study concluded that substituting a tax credit for a tax deduction - perhaps the most common reform proposal in this area in recent years - would probably result in an overall reduction in contributions because high-income taxpayers would give much less as a result of the increased cost of giving to them, even though this would be partially offset because low-income taxpayers might be expected to increase their "consumption" of giving since its price to them would now be lower.

In addition, if the results of some of the U.S. studies can be carried over to Canada - and some of the evidence cited in Chapter 2 above indicates that perhaps they may - the mix of total contributions might also shift greatly with such a tax change. The price-sensitive higher-income donors, whose relative importance in total giving would decline, tend to give more to non-religious charities. Both the price and income elasticities of giving to educational institutions in particular were found to be much higher than those to religious organizations in a 1975 study by Feldstein.[56] The implication of this finding is of course that those who want to increase giving to universities

should concentrate on increasing giving at the top, not the bottom, of the income distribution. Substituting a tax credit for a tax deduction, for example, as has long been advocated in Canada,[57] would on balance probably reduce rather than increase private gifts to universities - at least if these U.S. results (themselves of course subject to some dispute) may be applied to Canada's rather different charitable and tax environment.

Two final points may emphasize even more how little anyone really knows about the determinants of charitable giving in Canada, let alone about the effects on giving of various proposed tax changes. In the first place, a still more recent American study - not cited in Table 11 - has concluded on the basis of a more elaborate econometric approach (estimating a system of demand equations rather than a single equation) that in fact only high-income taxpayers are responsive to changes in the "price" of giving.[58] The low-income taxpayers who account for the great bulk of giving, particularly to religious organizations, were found in this study to be very responsive to changes in income but not at all responsive to price changes. The implication of this result - again assuming, without warrant, that it can be carried over to Canada - would seem to be that moving from a deduction to a credit would, as before, tend to reduce contributions to education and other non-religious activities but that this reduction is even less likely to be offset in aggregate by an increase in contributions by lower-income people than was earlier thought to be true.

Secondly, and even more basically, the very applicability of the fundamental "model" underlying all these estimates - that philanthropy is a service "consumed" by individuals like any other good or service - has recently been powerfully questioned in a paper which also, not so incidentally, casts severe doubt on the entire conventional case for the public subsidization of private philanthropy through the tax system or in any other way.[59] The flavour of this paper may perhaps be conveyed simply by citing its sweeping conclusion on the conventional approach: "...this theory has implications that are paradoxical, implausible and inconsistent with empirical evidence".[60]

All in all, without going into the rather complex merits of this criticism, it nevertheless seems fair to conclude the present discussion by noting that, when both the empirical results and the theoretical underpinnings of the connection between taxes and giving are under this sort of attack and revision - and when almost no serious work on the determinants of giving has been done in Canada - it would take a very rash person indeed to pontificate about these issues. The only really justified conclusion to the present brief summary is perhaps to note with regret that we simply do not know much about the effects on charitable giving of various proposed tax changes.

On balance, however, it seems likely that universities may be among those who benefit most from the present system of charitable deductions which favours wealthy donors more than poor ones. Measures that would lower the price of giving to the wealthy even further - for example, extending the favorable

treatment now granted gifts to the Crown and those under the Cultural Property Act to all gifts to universities - would also probably have some beneficial effect on giving to universities, whatever their desirability or undesirability when considered more generally. It is not possible, however, to say anything very useful or concrete about how much universities might benefit from such changes, or what the costs in terms of revenue and equity forgone might be.

In Ontario today, as a U.S. study of private philanthropy and university finance in that country noted a few years ago, it may well be the case that "...private philanthropy must provide resources to enable straining institutions to avoid reducing the quality of their offerings to remain solvent" and that tax policy should "...assist and not hinder this response".[61] On the whole, however, the present tax system probably "assists" private giving to universities fairly strongly already by lowering the "price" of giving most for those who are well-off, who probably give most to universities. Moreover, the 20 per cent income limit, which is probably only of much significance with respect to bequests of appreciated property in any case, has been substantially liberalized in recent years, as have the disbursement rules with respect to bequests and endowment funds, which may occasionally have pinched universities.

There are of course other tax measures that might increase giving to universities even more, such as the exemption from capital gains tax of gifts of appreciated property to universities or, more broadly, permitting the deduction for tax

purposes of more than the actual amount - say, 125% - of gifts to universities. Such measures would not be costless, however. Nor is any clear and obvious rationale apparent as to why universities should be thus favored relative to other recipients of charity. Finally, as emphasized above, it is impossible to say how much such measures would yield, to whom the benefits would flow, or for what purposes they might be earmarked.

This rather negative conclusion should not be taken, however, to mean that the universities themselves cannot and should not do more to take advantage of the already existing tax advantages for giving. The U.S. study cited above, for example, listed several functions of private philanthropic support of higher education which seem equally applicable in Canada: (1) to provide an important margin for improvement, to strive for excellence rather than adequacy; (2) to support innovative and risky programs with possibly large long-range payoffs; (3) to retain some degree of flexibility, diversity, and autonomy; and (4) to provide a buffer against the adverse effects of sudden shifts in government funding.[62]

In short, in an era of reduced or stagnant public-sector funding of universities, even a small amount of incremental funding from private gifts and grants may serve to save Ontario's universities from genteel decay and to permit their continued growth and improvement, at least in some areas of activity. In the words of a recent University of Toronto report, "...funds from such sources, small though they may be, can be crucially important to the academic quality of our institutions, since they

can be used in a discretionary fashion to innovate and to encourage excellence".[63] Such funds are not costless to raise, of course, nor are they always costless to receive, given the propensity of donors to favour specific projects rather than to give unrestricted support. But nothing in this world is free, and it seems likely that on balance, most universities would be better off with more funds, even if some are earmarked to particular buildings or programs, than with smaller, albeit perhaps less restricted, budgets.

Even if Ontario universities overcome all internal obstacles to the eager pursuit of increased private funding, however, it will not be that easy to come by since everyone is out there looking. As a recent Globe and Mail article put it: "When altruism [or, one might add, government] won't pay the bills, fundraisers seek new avenues to your pockets".[64] The competition for donations is fierce, and getting fiercer: arts organizations, welfare agencies, even hospitals, are getting into the act as public-sector support is cut back while costs continue to rise. A decade ago, for instance, a newspaper article on hospital funding could be titled "Fund Raising on Way Out?" (Financial Post, May 19, 1973); now it is more likely to be "Metro Hospitals Appealing to Public as Debt Forecasts go Through the Roof" (Toronto Star, May 31, 1984). This increased competition for the elusive benefactor, corporate or individual, means that those engaging in fund-raising activities have had to become more professional in their approach.

University fund-raising too must therefore become more professional, drawing on expert resources, engaging in continual solicitations of alumni and other identifiable groups, and so on. At times, some university policies and practices may need to be amended in order to carry out this task effectively, but the minor pain of making such changes should be relatively easy to bear if results are visible in the form of fresh funds flowing to new activities (and not drying up as quickly as would otherwise be the case for old ones).[65] It may be more painful for University presidents and boards of governors to redefine their task to be as much or more to encourage private support for university functions as to attempt to govern and regulate those functions. Indeed, it seems unlikely that Ontario universities ever will, or should, move as far in this direction as have many U.S. universities, public and private alike.[66]

Nevertheless, if universities are to depend more upon private support to maintain their vital cutting edge of innovation in the face of reduced or stagnant government funding, some serious rethinking and restructuring of the role and structure of their governing bodies may be required. Increasingly, university presidents in Ontario may, for example, come to be judged more in terms of their performance as fund-raisers than as statesmen, conciliators of conflicting internal factions, or distinguished scholars gone to their just reward. This result may not be very palatable to some, and it is unlikely in any case ever to be carried to the level sometimes seen south of the border - but some move in this direction is probably an

inevitable accompanient and perhaps precondition of any substantially increased dependence of Ontario universities on direct private donations for financial support.

Chapter 4

BUSINESS-UNIVERSITY RELATIONS

The previous two chapters provide a fairly thorough overview of what is known (or may be inferred) about many aspects of private philanthropic support of universities in Canada. The present chapter is included to provide some much more preliminary background material relevant to the more complex set of questions raised by the Commission's concern to "encourage industry-university linkages and industry support of Ontario universities."[67] The first section of the chapter sketches the broad terrain of university-business relations apart from the outright philanthropy discussed earlier. This section (and indeed this chapter as a whole) has benefited considerably from a recent study of corporate-university relations in Canada by the Corporate-Higher Education Forum.[68] The second section of the chapter then focuses more specifically on university-based research, particularly that part of it financed by business, with particular emphasis on the fact that such research in a sense really involves three, not just two, parties: as shown there, government policies, both with respect to taxation and to its own support of research, substantially affect the business-university relationship. Finally, the last section of the chapter reviews briefly the prospects for increasing business "commercial" support of university activities, as well as some of the problems of balance and bias to which such support may give rise.

Introductory Overview

As with respect to private philanthropy, whether the state of university-business relations in Canada is considered to be "good" or not depends on with what one compares it - with past experience, with other countries, or with some more abstract concept of the ideal state of relations. There seems little doubt, for instance, that the relations of the academy and the corporate world are both closer (and more diverse) at the present time than has ever before been the case in this country.[69] Moreover, these relations are probably as close as those in any other country - apart, of course, from the United States which in this, as in so much else, is unique in the scope and diversity of its triangular relations between business, government and higher education.[70] Whether corporate-university relations are "close enough" in Canada in some absolute or relative sense is of course a question that cannot be answered here.

What can be done, however, is to provide a quick overview of what a recent report has called "the extraordinary diversity of the current linkages."[71] First, and undoubtedly most important, is the role of universities as a primary provider of well-educated personnel for the private sector. To quote two recent pieces by business leaders:

> In order of importance, industry looks to higher education for: a steady supply of well-educated graduates; relevant basic science, and scientists able to offer fresh insights; and, sometimes, technological ideas and leads.[72]

> The emerging source of basic economic strength for any society is not capital investment or natural resources, as important as they are. It is brain power... Canada is not just facing a shortage of engineers. It is facing a potentially crippling shortage in almost every body of knowledge we will need in the next two decades. ...All disciplines are important to our future, even if some are more important than others at a given moment in time.[73]

Corporations (and the economy) are thus increasingly dependent on the output of trained university graduates. In recent years, some corporations, perhaps particularly those closer to technological frontiers, have come more and more to recognize this interdependence in a variety of ways. Some, for example, provide student awards based on academic performance, in order to encourage and reward excellence.[74] As noted in Chapter 2, others pay (or refund) the tuition of employees who undertake further education, particularly, but not exclusively, that related to professional upgrading. In some instances - the "Executive MBA" program at Toronto might be one example; another might be some of the special courses established at universities by the chartered banks - the full cost of providing such instruction may be covered, although this appears to be rare.[75] More could undoubtedly be done along these lines at least in some instances without unduly perverting universities from their central functions.

Similarly, in other (or the same) instances, more might also be done to free qualified corporate personnel to teach at universities (perhaps as adjunct professors) as well as to permit and facilitate university faculty taking industrial postings

during their research leaves. Obviously, some problems would be involved in expanding such interchanges at the faculty level beyond the miniscule (and one-way) number at present existing in Canada under NSERC's program of Senior Industrial Fellows.[76] There would appear, however, to be no insuperable difficulties to overcoming such problems as the difficulties academics sometimes have had in obtaining publishable results from such leaves or the short-run opportunity cost of sparing essential industrial research personnel for an afternoon a week at the university. Similarly, the more advanced equipment in company than in university labs is often mentioned, when deploring the conditions of the latter: why not take at least some students and professors to those labs, then, in some instances? None of these suggestions would necessarily be suitable in many, perhaps most, circumstances, but surely more can and should be done along these lines than appears to be the case at present. As the rapid and surprisingly successful expansion of co-operative education, not just at Waterloo but at some 20 other post-secondary institutions in Canada, has demonstrated, where there is a will, a way can usually be found.[77]

Most of the suggestions mentioned briefly above as possible ways of increasing corporate support of universities have received relatively little attention in recent years, however, despite apparently widespread agreement on the importance of improving the quality and, in at least some areas, the quantity of university-trained people. Instead, almost all attention has been paid to the prospects and possibilities of strengthening the

linkage between industrial and academic research. In the report of the Corporate-Higher Education Forum cited earlier in this chapter, for example, less than 10 per cent of the text is concerned with the problems of "brain power" as such. The rest of the report is instead devoted to describing, evaluating, and proposing ways to facilitate corporate-university cooperation through (1) joint ventures; (2) university-based interface institutes; (3) university-based research parks; (4) university-based companies; and (5) contract research, with particular emphasis on the first two. Although the next section of the present chapter focuses more explicitly on this research theme, it seems appropriate to conclude the present section by a very brief review (in reverse order) of these five forms of linkage.

Contract research is probably the major form of corporate-university research linkage in present-day Canada, at least in terms of the numbers of university faculty involved. Very little aggregate information is available concerning the size and nature of this activity, however, because much such research is still arranged and managed on an ad hoc basis by individual faculty members, often on a "moonlighting" basis. This is perhaps less true in those areas which rely heavily on access to laboratory facilities.) Such research may sometimes be socially beneficial - resulting for example, in the exposure of faculty to "real world" problems and hence perhaps in better scholarly publications and publicly-available additions to knowledge. In other instances, contract research may be socially detrimental, as when companies pick professional brains, presumably to the

private reward of both parties, but sometimes to the detriment of adequate professional contribution to the generation and transmission of knowledge. Universities may gain from the knowledge acquired by their faculty in such endeavors, or lose - both through the diversion of faculty time and, more concretely, through the invariable failure of outside contractors to cover the full costs of university-based researchers. The latter problem is of course greater when the contract research is a pure "moonlighting" effort, but it usually exists even when - as is increasingly the case in larger universities - many such efforts are run through University contracting offices. This point is discussed further in the next section.

A much more recent and less widespread form of linkage is the university-based company. Many probably feel, with reason, that universities ought to do a better job of managing their own business before becoming involved in the business of setting up wholly- or partly-owned corporate subsidiaries to market the products of university-based research. Nevertheless, it seems likely that this sort of effort will become more rather than less common in the future. The University of Toronto, for example, has recently established a separately-funded Innovations Foundation to aid in arranging commercial licenses and spin-off companies for university-generated research products. One such company - launched before the creation of this Foundation - has already shown some degree of success[78] - but it has achieved this success in effect by severing completely any institutional ties to the university. It may well be, however, as a recent Science

Council study rather pessimistically concluded, that most of Canada's universities are more likely to close the window on industrial research afforded by such activities than to, in effect, evolve into the sort of research park-cum-technical university that might otherwise emerge over time with the further proliferation of university-generated research companies.[79]

While Waterloo may prove an exception to this, as to some other generalizations about Ontario universities, it seems fair to conclude that for whatever reason there has as yet not really been a successful example of a university-based research park in Canada. Three reasons may be suggested to explain the failure to generate such activity on a self-sustaining scale in the past.[80] The first, as already noted, is the obvious reluctance of many universities, despite frequent statements by some spokesmen to the contrary, to make a serious commitment to linking industrial and university research in a continued and substantial way. One simply has to sit on a few university committees to realize the deep ambivalence felt - with good reason, given the traditional self-image and perceived role of universities in Canada - within university faculties on such matters.

Secondly, perhaps not enough attention has been paid to the often-pivotal role of government decisions (or non-decisions) in shaping the growth and nature of the academic research community in this country. Three examples may suffice to make the point: (1) The Sheridan Research Park complex in Mississauga was (apparently deliberately) placed at a distance from the existing university-based research complex - for example, the Ontario

Research Foundation was moved there from the University of Toronto campus. (2) Federal departments appear to have been most reluctant either to contract substantial on-going tasks (e.g. drug testing) to university labs or to construct their own research facilities in proximity to university facilities to encourage synergy. (3) When, presumably after due and agonizing deliberations, the federal government decided to spend several million dollars on microelectronic research, it scattered its resources across seven university centres, thus achieving a nice regional balance - if not necessarily a viable research base. Similarly, when the Ontario government decided recently to foster industrial research through six technology centres, it both scattered them about the province and essentially located them in such a way as to make it very difficult for any links to be established with university-based researchers.

And finally, there is of course also often considerable reluctance from the business side - perhaps owing largely to "cultural differences"[81] - to becoming closely involved with university researchers. (This last point is discussed briefly in the final section of this chapter.)

Much the same arguments apply, of course, to university-business joint ventures and to so-called "interface" research institutes. Nevertheless, not only have these two sorts of linkage received most publicity in recent years, but they have also been the most actively developed. A recent report, for example, listed 20 such institutes (11 in Ontario) in which corporations have played a strong role, along with 37 joint

ventures (6 in Ontario).[82] Table 12 lists the apparent Ontario players in this game. With very few exceptions, most of these ventures are very new - and new ones seem to be popping up every day.[83] Rather than rehearse this well-trodden ground further here, however, the final section of the present chapter will consider a little further the prospects and problems of such developments, following a brief review in the next section of university-based research in Canada.

The Research Triangle: Government-Business-University

Table 13 presents some basic data on the size and funding of university research in Canada.[84] The first two columns of the table cover what seems often to be thought in Canada of as university "R and D" - and is, indeed, so labeled in the official statistics - namely, expenditures on health sciences and on natural sciences (including engineering). As seen there, universities perform a substantial but declining proportion of such activity in Canada. The same trend is apparent when all university research activity, including that in the social sciences and humanities, is taken into account, as in the next two columns of Table 13. The role of the universities in "other" ("non-R and D") research, however, has in fact increased sharply over the period - from 73 per cent of the total of such research in 1976 to 82 per cent since 1979 - even though the proportion of total university research devoted to such "non-R and D" research

TABLE 12

Formal University-Business Linkages in Ontario

University	Supporting Businesses	Title	Start-up Date
	- Interface Institutes -		
Carleton /Ottawa	Various	Ottawa-Carleton Research Institute	1983
Guelph /Toronto	Various	Canadian Centre for Toxicology	1982
Guelph	Ontario equine industry	Equine Research Centre	n/a
McMaster	n/a	Institute for Polymer Technology	n/a
Queen's	CNR, CPR	Canadian Institute of Guided Ground Transport	1970
Queen's	Mining Association	Centre for Resource Studies	1973
Queen's	Northern Telecom	Canada Microelectronics, Inc.	1983
Queen's	Dupont	NMR Spectometer Lab	1981
Waterloo	Various	Institute for Computer Research	1983
Windsor	Various	Institute for Canadian-American Studies	1939
	- Joint Ventures -		
Carleton	Honeywell	Software development	1978
Guelph	GEAC	On-line library system	1977
McMaster	X-Ray Assay	Nuclear Activation Services Ltd.	1979
McMaster	Hewlett-Packard	Software	1983
Ottawa	Various	Kanata High Technology Training Association	1983
York	Scintex Ltd.	Unisearch Associates	1983

Source: Partnership for Growth (Corporate-Higher Education Forum, 1984), pp. 28-29, 38-39.

TABLE 13

University Research Expenditures, 1976-1983
($ million)

Year	University R and D Performed	As % Total	University Research	As % Total	Percentage Distribution of Source of Research Funds: Fed. Govt.	Prov. Govt.	Univ.	Other
1976	481	26.3	664	31.9	25.6	9.0	61.0	4.4
1977	540	26.3	750	32.2	25.7	8.8	60.1	4.4
1978	594	25.4	821	31.2	26.8	9.0	58.1	5.6
1979	653	24.3	897	30.0	26.6	9.2	58.1	5.8
1980	741	23.2	1,019	28.9	28.8	10.3	55.2	5.1
1981	828	21.4	1,138	26.8	31.3	10.4	52.1	6.0
1982	908	19.3	1,250	24.4	31.4	10.8	52.0	6.0
1983	1,000	19.1	1,376	24.2	31.4	10.8	52.2	5.9

Notes: (1) University "research" encompasses all institutes of post-secondary education. 1982 and 1983 figures for university R and D performance are preliminary.
(2) The difference between "R and D" and "Research" is research in social science and humanities.
(3) The sources of funds for research in social sciences and humanities are estimated for 1981-83 on the basis of 1976-80 figures in Statistics Canada, Annual Review of Science Indicators 1980 (No. 13-212), p. 65. The percentage distribution calculated from this source has also been applied to the rather different figures estimated for 1976-80 in the 1983 publication cited. (Similar figures may be estimated on the assumption that all government funding of such research in excess of government performance of such research goes to universities.)
(4) "Other" includes business enterprises, private-non-profit, and foreign.

Source: Statistics Canada, Canadian Science Indicators 1983 (No. 88-201).

actually declined slightly over the same period. In other words, while universities have increased their research expenditures in "hard" science (especially the health sciences) over this period more rapidly than they did in other fields, they still did not increase these "R and D" expenditures nearly as fast as did other sectors, particularly business, which accounted for 63 per cent of the total increase in Canadian R and D spending from 1976 to 1983 (and rose from 41 per cent to 56 per cent of the total). In constant dollar terms, business R and D over this period rose by 113 per cent, compared to a rise of only 15 per cent in R and D performed by universities.[85]

Almost all the $2,004 million in R and D performed by firms in 1981 was either self-financed (76 per cent) or financed from other private sources, domestic or foreign. Only 11 per cent of business R and D was financed directly by governments (in addition to perhaps another 5 per cent from tax relief of various sorts). In turn, business financed 8 per cent of the small amount of R and D carried on in the provincial government sector ($137 million in 1981) and 3 per cent of the even smaller amount ($30 million) performed by the small private non-profit sector (consisting mainly of a few health research organizations). Perhaps more surprisingly, business financed only $4 million out of the $828 million of university R and D - or less than one-half of 1 per cent. If "other" university research - to which business contributed nothing - is taken into account, as in the distribution of sources of funds shown in Table 13, direct business support of university research shrinks even further into statistical insignificance.

As shown in that table, Canada's universities both account for about one-quarter of all research expenditures, and finance over half of that amount directly out of their own resources. While anyone familiar with university accounting knows that this last figure must obviously be an estimate, it deserves emphasis that it apparently includes no estimate of faculty time spent on research. Instead, it appears to include only the direct cost to universities related to research activities which are not covered by funds received as research grants and contracts: in 1981-82, for example, 12 per cent of university operating expenditures were estimated to be devoted to such expenditures, mainly for supplies, equipment, and non-academic salaries.[86] Of course, these funds too really came from government as part of regular university operating funds, although as a rule this funding is not clearly related to research in any manner.[87]

To sum up, the role of universities in Canada's research effort is obviously very important, both as performers of research and, what is perhaps less widely realized, also as funders of research. The direct funding of university-based research by corporate Canada is miniscule at the present time. Even if half the university research funded by private nonprofit organizations is also assumed (with no particular warrant) to come indirectly from the corporate sector, less than $40 million of total university research of $1,376 million in 1983 could be said to be funded by the corporate sector, with less than 6 per cent of this total being funded by the private sector as a whole. Statistically speaking, it appears, corporate-university

relations in the research area may be generating a lot of publicity, but there is as yet not much money in university coffers to show for it.

A second point which emerges clearly even from this quick overview of the data is the overwhelming importance of governments, both federal and provincial, as sources of funds for university-based research, particularly of course if their "indirect" contributions (the share of general university operating budgets that goes to support research) are also taken into account. In 1983, for example, the federal and provincial governments together directly financed $503 million (50 per cent) of university R and D and an estimated $71 million (19 per cent) of other university research, for a total of $574 million or 42 per cent of all university research from direct government sources. The role of governments is in fact even more critical than indicated by such figures, however, for government policies to a large extent determine the size and nature not only of university research but also of business research expenditure - including that small part of it which is spent at universities.

The balance of this section explores some of the reasons why it seems correct in Canada to speak of a "research triangle", with the three corners being government, business and university, each dependent in different obvious and not so obvious ways on the other. Government funds research in the corporate sector both directly (through grants and contracts) and indirectly (through tax subsidies): in return, business presumably provides what governments want - more R and D. Similarly, for the same

reason government also funds research in the universities both directly (through grants and contracts) and indirectly (through the portion of the operating budget that supports research). Finally, in what is clearly the weakest link of the triangle at present, business buys a small amount of direct research from universities - and receives benefits not only from this expenditure but also from the resulting supply of trained researchers and, to a limited extent, the knowledge generated from government-financed university research.

Over the last thirty years, both federal and provincial governments have allocated ever-increasing amounts to the encouragement of scientific and industrial research and development in the private sector. These financial transfers have been of two types: direct grants-in-aid and tax incentives. We shall say nothing much here about grants and consider only briefly those aspects of the tax rules governing business-sponsored research that seem of direct relevance to Canadian universities.[88]

While the logic of tax accounting suggests that business spending in the hope of enhancing future income is an expenditure of a capital nature and hence should not be deducted as a current expense, an explicit exception is made under the Income Tax Act in respect to basic and applied specific research and to innovative product or process development.[89] To begin with, all costs of an eligible program are treated as tax-deductible expenses whether they are of a "current" (or intangible) nature or of a more clearly "capital" nature (i.e., requiring

acquisition of tangible assets - other than land). The taxpayer has the option of full write-off of all such expenses to the extent of his otherwise taxable current income (with the normal carry-back and carry-forward of losses) or else of a spread of his own choice over the future. The write-off is, however, reduced by grants and loans received under specified government research-financing program. (If and when such amounts are repaid, they become tax deductible.)

Moreover, from 1977 to 1983, a corporation (but not an individual) that increased its qualifying research expenditure, beyond the average of the previous three years, was entitled to an additional tax deduction amounting to 50 per cent of the increase. This special allowance, however, has now been replaced by the enriched investment tax credit described below. In addition, the general investment tax credit provisions were also made applicable to qualifying scientific research spending in 1977, thus permitting corporations or individuals to claim a credit against federal tax otherwise payable amounting to 10, 20 or 25 per cent of expenditures, depending on the location and size of the business. (This tax credit, however, reduced the permitted expenditure write-off, dollar for dollar.)

One complaint about the R & D tax incentives as they existed in the early 1980s, generous though they were,[90] was that they could only influence the conduct of those businesses that were actually currently liable for taxation: those who have no profits do not benefit from reductions in their nonexistent taxes! In 1983, therefore, the federal government extended the

benefits even to those businesses not currently paying taxes: corporations engaged in qualifying research and development may now transfer their potential tax benefits to outside investors who purchase shares or debt.[91] At the same time, the 50 per cent additional allowance on incremental corporate R & D was replaced with an enriched investment tax credit to corporations and individuals. The general rate of this credit was raised to 20 per cent of qualifying expenditures, to 30 per cent for research conducted in the Atlantic provinces or the Gaspe, and to 35 per cent for small business corporations.

Two further points may be made with regard to the relevance to universities of these research and development tax incentives. First, a program will qualify for all these benefits if it is "for research related to the class of business of the taxpayer" and is financed at any Canadian university or affiliated college (Interpretation Bulletin IT-151R2). In other words, business-financed research performed by a university qualifies for the tax benefits described. On the other hand, it should perhaps also be noted that, where an expenditure might be construed as either a charitable donation or as a payment for scientific research, it may not be treated, for tax purposes, as a charity claim.

On the whole, however, there does not seem to be strong tax bias for or against corporate-financed university research at present. The most recent federal report on technology development, however, would apparently tilt this system more to favor university research, both by giving companies a 50 per cent tax credit for R and D performed on their behalf by universities

and by paying a 25 per cent bonus to the universities themselves based on the value of industrial research contracts.[92] In addition, this report recommended that the federal government should pay the full cost of all research sponsored by it at Universities. If all these recommendations were to be adopted, a new day indeed would dawn for university research (at least in natural and health sciences and engineering).[93]

Matters would be even better in this regard if, as they should, universities also began to charge industry (and provincial as well as federal governments) for the full cost of research carried out on its behalf.[94] Other changes needed to facilitate the establishment of sound industry-university research relations are for the federal government to remove some of the present rules favouring contracts with profit-making as opposed to non-profit researchers and to stop trying to beat its own rules to avoid paying even the minimal indirect costing now allowed on research contracts. Unless some changes are made in these respects by both universities and governments, it is all too probable that successful efforts to attract more private sector dollars into supporting university research will turn out in the end to be a financially losing proposition. To quote James McPherson's accurate summation of the present situation:

> It is time to recognize the negative impact on their position, when universities claim to be under-funded, under-staffed, under-built, and under-equipped, while at the same time acquiescing to their clients' insistence that they maintain a pricing policy on contract research which can only be justified by the assumption that most components of indirect costs are already paid for, by their

> financially sound, well staffed, well equipped institutions.[95]

Increased government support through matching grants (as announced in Ontario's 1984 budget and proposed by the recent federal task force) combined with policies to cover adequately the full costs of government research grants and contracts would lead to more, and more adequately-funded, university research in themselves. Moreover, and equally important, such policies are needed to ensure that any increased private research funds flowing to universities (as a result, for example, of differential tax credits) will improve rather than worsen their present precarious financial position.

Prospects for Increased Support

A recent study of corporate-university relations in Canada placed considerable stress on the "cultural differences" between business and the academy and indeed argued that "the key to success [in improving relations] is to overcome cultural differences."[96] There is little that can be added in this respect to the plans in that study for more efforts at understanding on both sides - combined with well-defined agreements with respect to particular research projects. Dealing with business is a serious business, and those universities that want to be successful in such endeavors must take them seriously, hiring the marketing, managerial, legal, and accounting talent

needed, as well as giving their own faculty entrepreneurs support and a clearly-defined guiding framework.

Among other difficult tasks, university policies on linkages with corporate Canada must be both well-coordinated internally - as in the "Action Plan for a University" set out in the study just mentioned, for example - and at the same time decentralized, in order to encourage rather than stifle the development and growth of industry-university linkages, both formal and informal.[97] It is, of course, much easier to say this sort of thing than it is to do it, but this is the path that seems necessary if universities decide that at least part of their salvation lies in strengthening private-sector support of university research. The main burden of developing an adequate policy framework in this respect clearly lies on the universities themselves. The long-term future of the country and its industry may indeed lie in the laboratories of Guelph, the software engineering of Waterloo, or whatever, but it is the universities that have the most to gain in the short-term and hence must make the major effort needed to improve the two-way flow of information, ideas, and more tangible items between business and the academy.

Government too has a critical role to play in this process, however, both in fixing the terms of the research relationship (as indicated in the last section) and by facing up to some politically unpleasant truths about the nature of the research enterprise. In particular, governments will have to resist their apparently overwhelming tendency to stifle research by attempting

to coordinate it and to direct it to currently fashionable objectives on the one hand and by ensuring that everyone gets their bit on the other hand. In both of these respects, of course, governments probably reflect deep-seated Canadian prejudices. Even the recent report to the Corporate-Higher Education Forum, for instance, has a section entitled "collaboration is extensive but not evenly distributed"[98] - as if such uneveness were a problem to be resolved rather than the outcome to be expected in a dynamic market-driven research endeavor. Spreading research funds, like fertilizer, at a rate of so many units per square kilometer, is not the best way to produce a large crop of viable ideas.

In particular, there is a good deal of evidence to suggest that the best results from university-industry research efforts are likely to emerge when a number of such efforts are carried out more or less contiguously, permitting ideas and people to rub against each other more or less continuously. Once again two recent American comments on such matters may suffice to put across this idea vividly:

> "Those universities in areas that do not have a steady flow of new entrepreneurs and a host of intellectual and social activities may be pursuing a pipedream."[99]

> "Faculty with ideas of commercial value...located closer to large cities...have more opportunities to discuss with potential customers the feasibility of their ideas, readier access to sources of financial support and, when the time comes to start operations, a larger and more varied labour force upon which to draw. [There are also more]...examples of successful entrepreneurs to stimulate the interest and avarice of faculty members."[100]

In short, those who have the most are likely to do the best. The resulting degree of (essentially unplanned) concentration of effort in a few centres may not be "fair", but it seems inevitable if governments in Canada are seriously concerned to play in the big international leagues. Of course, permitting concentrated research efforts to emerge more or less spontaneously, and supporting such concentration through (e.g.) increased funding must be sharply distinguished from the apparently common tendency to pick out the favoured sectors or sites in advance, to shower them with funds, and then to continue to stand by and support them long after they should have been abandoned. To quote another recent report, "when the government is a player, it's very difficult to abort an unpromising research project, let alone one which seems to show promise once it's got started."[101] The problem with government-direct research is not so much that it is hard to pick winners but that it is so hard to abandon losers.

Increased imbalance among university research efforts thus seems an inevitable accompaniment, indeed perhaps an essential ingredient of success, in any increased reliance on direct corporate support for university research efforts. Although governments may perhaps, in the end, be able to swallow such imbalance in the name of the greater good, it seems more problematic whether the universities themselves will be able to cope with the resulting internal imbalances. The universities will, as already suggested, have to do a lot to engender increased private support in the first place - selling

themselves, getting a good price for what they sell, improving their internal management structure, and so on. All of these very unacademic activities will create a good deal of stress on the governing structures of universities. When, in addition, the main immediate result of success in this endeavour will be to accentuate sharply the imbalance between (probably) some of the more science-and-technology oriented parts of the university and the rest, the already difficult life of senior university administrators may become impossible.

Those who receive such outside funding will expect, and deserve, adequate internal support as well and will certainly resent bitterly any indication that they are paying for their success in terms of reduced internal budgetary allocations. Others may not receive much such funding not because of any quality differential but because, for instance, their work is currently unfashionable or is too concerned with building up long-term intellectual capital to attract generally short-term oriented research funding (which too often wants only to draw down already accumulated capital rather than to build it up). Those in this situation will understandably resent the wealth being showered upon their colleagues from outside and will argue for compensating increased internal support.

No easy solution to this dilemma is apparent. The beginning of wisdom, however, is surely to recognize that rather than increased private funding of university research <u>replacing</u> public funding, as seems sometimes to be thought, it is more likely to require <u>increased</u> public funding both to change the

terms of the research relationship (as argued earlier) and to provide the resources needed to retain the degree of balance in university structures necessary in the long-term public interest. Some faculties, and some faculty members, probably will and should be better off than others in the final analysis - just as they are now - but it would seem social folly indeed to face Ontario's universities with the choice of becoming either "techniversities" or undergraduate teaching institutions.[102]

A recent private report concluded that "...there will be no end to the decline in academic standards until the provinces reform the way they finance the universities...to restore to the universities the freedom and the responsibility to manage their own resources and...to create incentives for the achievement of excellence.[103] Another recent official report concluded, with specific reference to Ontario universities, that "while some additional funding may be initiated by the BILD program and the IDEA Corporation...such funding [should] be closely related to the basic objectives of the universities and be co-ordinated with the basic funding policies... ."[104] Financial wisdom, and the necessary sound underpinning of any effort to increase private sector funding of universities, would seem to lie in the combination of these two ideas. Increasing private support of universities - whether philanthropic or with a "commercial mission" - may be necessary; it may even be desirable; and it is probably possible; but it is not a free good for either the universities or for the government.

Chapter 5

CONCLUSION

No lengthy conclusion to the discussion in the preceding chapters seems required. Perhaps, however, four central points which seem to emerge fairly clearly from the rather confusing array of materials assembled in the present study may be restated briefly here.

- In the first place, neither private philanthropy nor increased business funding of research offers any real solution to the pressing financial difficulties of Ontario's universities. Superhuman efforts would, for example, be required to double the present flow of support from these sources, but even thus increased such funds would not make a significant aggregate contribution to university finances.

- Secondly, however, it seems both possible and desirable to increase direct private support of universities, particularly when they are likely to remain under financial pressure for years to come. Private funds may not be substantial enough to make a large difference but, properly used, they may enable universities to continue to adapt and change as they must if they are to perform adequately their most

basic functions. Even if, as is likely to be the case, private funding flows more readily to some parts of the academic community than to others, gift horses should not be turned away simply because some must walk while others ride. The management of universities will not be made any easier by increased reliance, even marginally, on private funds, but a quiet life for managers does not seem a particularly relevant policy aim.

Thirdly, the lead in increasing private support must be taken by the universities themselves. Their continued well-being is undoubtedly in society's interests, but in the present circumstances it is up to them to generate the interest and funds - whether public or private - on which that well-being ultimately depends. Governments can and should help this endeavour, particularly with respect to research funding, but in the end the catalytic role in engendering support must be played by Ontario's university presidents, governing boards, and faculty members. Both universities and governments, like everyone else, may of course have to face up to the unpleasant truth that it is not possible to pursue inherently contradictory goals (such as excellence and equality) simultaneously and costlessly.

> Finally, and closely related to parts of the two preceding points, it seems likely that a more decentralized approach will prove more successful in generating increased private support than will a more centralized approach. The costs of decentralization seem obvious: a certain degree of anarchy, competitiveness, inequality, imbalance, and envy. Its virtues are less obvious but no less real: for example, a larger flow of support in general, with most going to those areas perceived, in a sort of public jousting match, to be most worthy of support at the moment. Such costs of the tidier centralized path, whether within or among universities - as perpetuation of the old and suppression of the new, and so on - are also less obvious, but no less real than its apparent appeal to the orderly minds of most academics and bureaucrats.

In short, obtaining a limited amount of additional private support for Ontario universities seems possible and probably on balance desirable, but it will not come about without substantial changes in actions and attitudes by both universities and governments - as well as, in all likelihood, the private sector itself.

NOTES

1. Commission, Ontario Universities 1984: Issues and Alternatives (Toronto, 1984), p. 28.

2. Ibid., p. 21. The following quotations are from the same source.

3. Elsewhere, the Chairman of the Commission has suggested, in effect, at least a partial return to the pre-1960s scene when business and industry covered more of university costs (As quoted in University of Toronto Bulletin, June 11, 1984, pp. 1-2). As has often been noted, however, comparisons with the small, elitist university sector of the 1960s are at least as treacherous as the U.S.-Canada comparisons commented on later in this report. It is not clear we have much to learn from our experience three decades ago: and, if we do, it could as well be that universities should withdraw further from the world (or at least the market) as that they should engage more strongly in it. (For a statement along these lines, see John F. Graham, "Perceptions of Canadian Universities in Relation to Funding: A Maritime Perspective", in David M. Nowlan and Richard Bellaire, eds., Financing Canadian Universities: For Whom and By Whom? (Toronto: Institute for Policy Analysis, University of Toronto and Canadian Association of University Teachers, 1981), pp. 85-91.)

4. This useful phrase is taken from a recent article by the President of Exxon Research (Edward E. David, Jr., "Supporting Research with a Commercial Mission", Change: The Magazine of Higher Learning, 14 (Sept. 1982), 26-29) in which he distinguishes corporate philanthropy from corporate expenditures more directly consistent with the "commercial mission" of corporations.

5. This section started out as a simple updating of a similar set of estimates we had presented some years ago (R.M. Bird and M.W. Bucovetsky, Canadian Tax Reform and Private Philanthropy (Toronto: Canadian Tax Foundation, 1976), chap. 1). The appearance of new data sources, the disappearance of old ones, and the constant change of data classifications and presentations, made this task far from simple, however. Consequently, we have had to spend much more time and effort on obtaining the numbers presented here than we originally envisaged. While only those who have tried to assemble meaningfully comparable data from different statistical sources can perhaps fully appreciate the warning, we would emphasize the basically unsatisfactory nature of the data on philanthropy in Canada and thus the need to be very cautious in making much of apparent changes in the various numbers

from year to year or source to source. Despite these problems, however, we think the general picture set out in the present report is broadly correct - if inevitably a bit fuzzy at various points.

6. These figures are deflated by the CPI. If the implicit GNE deflator for personal expenditure in services is used, as may be more appropriate, the comparable figures for 1971 and 1981 are (in 1971 dollars) $319 and $315 respectively.

7. This estimate is based on data contained in Department of Finance, Analysis of Federal Tax Expenditures for Individuals (Ottawa, 1981), Tables 8-9.

8. This statement is based on figures for earlier years reported in Bird and Bucovetsky, op. cit., p. 11: unfortunately, the source used there is no longer available.

9. Alan Arlett, "Charities Caught by High Costs as Donations Slip", Financial Post, March 13, 1982. As a proportion of total corporate profits, this figure is roughly comparable - a bit lower - than those reported for the late 1960s in Samuel A. Martin, Financing Humanistic Service (Toronto: McClelland and Stewart, 1975), p. 71.

10. Unpublished surveys cited in C.R. Webster, "Public and Private Philanthropy in the Eighties", The Philanthropist 4 (Winter 1984), 43. The total corporate donations distributed by purpose in this source are much smaller than the amounts reported in Table 4 in the text. (Webster, p. 38, estimates corporate donations as a proportion of profits, but illegitimately compares the donation data from tax statistics with the profits data from national income accounts.)

11. For the earlier survey, see Martin, op. cit., p. 80.

12. Alan Arlett, ed., Canadian Directory to Foundations and Granting Agencies (Fifth ed.; Toronto: Canadian Centre for Philanthropy, 1982), p. xv.

13. Ibid., p. xvi.

14. Ibid., pp. ix-x. See also the article cited in note 9 above.

15. The apparent "mistake" has two sources: (a) a preliminary survey report for urban areas only is used and (b) the number of those not itemizing for tax purposes (which is greater than the number claiming the standard deduction) is incorrectly estimated. (For the method used, see Hans Deeg, "The Changing Face of Givers", Financial Post, March 13, 1982.) It should be noted the present authors have also made their share of mistakes in this field, both in the past and probably in the present: e.g. where, if at all, are bequests captured in the present estimates?

16. As shown in Table 7, amounts received from other charitable organizations are $530 million - but the same study shows elsewhere that the amounts contributed to other charitable organizations are $627 million.

17. Another possibly encouraging coincidence may be worth mentioning here. As mentioned in note 5 above, some years ago, by manipulating the then available data, we estimated that total charitable giving in 1971 was $749 million (Bird and Bucovetsky, op. cit., p. 15). The 1971 survey of charitable organizations (Nos. 61-211, 61-212) which was published around the same time reported that total charity excluding hospitals, teaching institutions (and receipts from other charities) was $671 million. Assuming contributions to hospitals and teaching institutions rose from 1971 to 1980 at a rate halfway between religious donations - which, as discussed earlier, increased more rapidly over the 1970s than other donations - and other donations (excluding hospitals and teaching institutions), the missing elements can be estimated and added to achieve a total estimate of Canadian charity for 1971 of $752 million. While it is hard to know what to make of such number games, this calculation would at the least seem to lend a little weight to our assertion in the text that a 1979 estimate of $1.5 billion for total giving (let alone $1.3 billion) is almost certainly on the low side.

18. Martin, op. cit., p. 157.

19. D.G. Ivey, "The Update Campaign for Private Support", University of Toronto Bulletin, January 25, 1982, p. 8. This total includes outstanding pledges of $2.1 million, so the actual cash receipts during this five-year campaign at Canada's largest university were $30.8 million or an average of $6.2 million per year.

20. Memorandum from D.G. Ivey to Campus and Community Affairs Committee, University of Toronto, April 11, 1983.

21. Christine Tausi, "Alumni Funds Give Universities Leeway", University Affairs, April 1982, p. 4.

22. Mary Mauksch, Corporate Voluntary Contributions in Europe (New York: The Conference Board, 1982), p. 1.

23. Ibid., p. 25.

24. Ibid., p. 34; U.S. figure from Kathryn Troy, Annual Survey of Corporate Contributions, 1983 Edition (New York: The Conference Board, 1983), p. 16.

25. "Charitable Britain", The Economist, Dec. 26, 1981, p. 92.

26. See Bird and Bucovetsky, op. cit., pp. 4-6; also Novia Carter, Trends in Voluntary Support for Nongovernment Social Service Agencies (Ottawa: Canadian Council on Social Development, 1974), p. 19.

27. This general picture is broadly confirmed by the quite different survey data reported in the annual Conference Board surveys (such as that cited in note 24 above) which cover 35-40 per cent of total corporate giving in the U.S.

28. The derivation of the Canadian figures may be found earlier in the text; the U.S. figures come from data in Giving U.S.A. (New York: American Association of Fund-Raising Counsel, Inc., annual). The 1980 figure for U.S. corporate giving in relation to pretax profits was, as already mentioned, considerably higher at 1.07 per cent: indeed, by 1982, this figure had risen to 1.77 per cent. On the other hand, no comparable change took place in individual giving as a proportion of personal income.

29. Yearbook of Higher Education, 1983-84 (15th ed.; Chicago: Marquis, 1983), p. 729.

30. Statistics Canada, Financial Statistics of Education 1980-81, Table 18.

31. Encyclopedia of Educational Research (5th ed; New York: The Free Press, 1982), vol. 2, p. 692.

32. The importance of "cleaning up" U.S. figures before making comparisons with Canada comes out in many different ways. In 1982, for example, alumni giving to American universities accounted for 25 per cent of all their charitable receipts, although these figures were substantially inflated by two huge gifts (totalling $115 million dollars) from one estate to Harvard and Washington Universities (Giving U.S.A. 1983, p. 51). If this exceptional benefaction is removed, alumni giving accounted for 23 per cent of gifts received by U.S. universities and all individual giving for 46 per cent. By way of comparison, Toronto's update campaign (cited earlier in the text) received 49 per cent of its support from individuals, with 17 per cent coming from alumni. Foundations provided 21 per cent of total giving to U.S. universities (15 per cent in Toronto's case) and corporations 20 per cent (36 per cent at Toronto). These figures thus suggest that, while Canadian corporations may indeed be less generous in general than their U.S. counterparts (or parents), Canadian universities may depend more on corporate support than do their U.S. counterparts. Not much should, however, be made of this very tenuous comparison.

33. Martin, op. cit., p. 168.

34. Joseph Berman and Edward Waitzer, "Public Policy and the Tax Treatment of Philanthropy", The Philanthropist, Winter 1982-83, p. 6.

35. Wolfe Goodman, "Proposed Changes to the Tax Credit System", The Philanthropist, Winter 1982-83, p. 20.

36. This is the "Give" part of the "Give and Take" campaign mounted in recent years by the Coalition of National Voluntary Organizations. See, for example, Coalition, Voluntary Action (Ottawa, 1982) as well as House of Commons Debates, Vol. 127, No. 63 (April 3, 1984), pp. 2657-60.

37. A much more extensive treatment of this subject, including the historical development of the various provisions, may be found in Bird and Bucovetsky, op. cit., pp. 16-32. The present review is limited to a description of the existing provisions.

38. Since the only tax at death now existing in most of Canada is the tax on income (including deemed dispositions of appreciated property) in the year of death, there is probably less incentive to leave charitable bequests - which now come to a much greater extent than before out of the pockets of heirs - than there was before the effective disappearance of death taxes almost a decade ago: for an extended treatment of the issues involved in the introduction of the capital gains tax at death in replacement of estate and inheritance taxes, see Bird and Bucovetsky, op. cit., pp. 33-58.

39. See, for example, the discussion in House of Commons Debates, April 3, 1984, pp. 2659 (Mr. McLean) and 2667 (Mr. Roche).

40. If a claim of the full market value of an appreciated asset would not pierce the 20 per cent limit, it will always pay the donor to elect full value. The appropriate choice will be a lower amount if he is constrained by the limit. See M.W. Bucovetsky, "Tax Law Made Easy", Canadian Tax Journal, 22 (Jan.-Feb. 1975), 82-86.

41. Actually even if a certified asset is sold to a designated institution, the seller is spared the tax on any capital gain, although of course he cannot claim a charitable donation since he (unlike the government) did not give anything away in this case.

42. Interpreting this provision has led to such convoluted reasoning as the following from Department of Communications, Cultural Property Export and Import Act 1980-81 (no pagination):

> "The phrase "publicly owned", if interpreted in its strictest sense, would preclude designation of the many public museums and galleries chartered as non-

profit corporations as well as those under the auspices of churches. It has been ruled, however, that "publicly owned" can be interpreted as meaning "owned by a segment of the public" if that segment is large and non-exclusive. As a result of this interpretation, church archives, for example, are now considered eligible for designation under the Act."

43. Department of Communications, Cultural Property Export and Import Act 1982-83, p. 35. For a vehement protest at this ruling - labelled a "sellout to revenue" - see The Canadian Taxpayer, 6 (May 8, 1984), pp. 78-79. The gist of this protest appears to be that the Board has only one task, to certify the cultural importance of the property, and not the two tasks apparently set out in the law, of certifying not only the importance but also the value of the asset.

44. All data come from the 1982-83 issue of the Report cited in note 43. (Note that these amounts, unlike gifts to the Crown, are presumably already included in the estimates of giving presented in Chapter 2 above.)

45. Foreign universities which are explicitly named in the income tax regulations constitute another category of eligible recipient. The other five are Canadian municipalities, the United Nations and its agencies, registered Canadian amateur athletic associations, housing corporations (tax-exempt entities providing low-cost housing for the aged), and foreign charities to which the federal government has made a gift within a specified recent period.

46. A "public foundation" is obliged to meet the "80 per cent of receipted donations" rule, and, further, its charitable disbursements must also exceed 90 per cent of its income for the year. The most detailed spending rules apply to private foundations where, presumably, the greatest opportunity for abuse of tax-free status exists. Such foundations are required to spend at least 90 per cent of their income on charitable activities, subject to a further test ensuring that 90 per cent of income from non-widely-traded assets came to at least 5 per cent of the fair market value of those assets.

47. "If tax law changes, universities are in a bind", University Affairs, October 1983, pp. 9, 22.

48. Actually, many higher-income individuals may also in effect "claim" the tuition deduction by means of a rather simple tax planning device which amounts to making a properly documented interest-free demand loan of income-producing property to a child (over 18): the child will then be subject to tax on the income but he or she may also of course deduct his tuition fees against that income. The net result, of course, is that those parents with sufficient money to play this game

in effect pay tuition fees out of before-tax rather than after-tax income.

49. Department of Finance, Government of Canada Tax Expenditure Account (Ottawa, 1979), p. 86.

50. There has also been considerable recent discussion about another income tax interpretation affecting some academics, namely the appropriate tax treatment of artists: this problem appears now to be in the process of being resolved in such a way as to enable some faculty members to claim much larger deductions from income than would otherwise be permitted. Further discussion would, however, take us too far away from the main topics of this report.

Parenthetically, there are also some commodity tax concessions affecting universities - e.g., exemption of technical and educational books and of many items bought by educational institutions from federal and provincial sales taxes (as well as exemption from municipal property taxes). Although these items should really be treated explicitly in any full study of the interaction between the tax system and educational finance, they are not further discussed in the present paper.

51. See Statistics Canada, Financial Statistics of Education, 1980-81, p. 65, for tuition fees. The 1980 estimate of the "tax cost" - note that this is a rather tricky concept on which there is an extensive literature that is not discussed in detail here - of the itemized charitable contribution and the standard deduction combined was $375 million for individuals (with an additional $50 million for corporations): see Department of Finance, Government of Canada Tax Expenditure Account (Ottawa, 1980), p. 24. At most, perhaps 15-20 per cent of this amount may be attributed to educational giving (assuming such giving mostly comes from corporations and higher-income individuals).

52. As Mauksch, op. cit., documents, tax incentives for charity in other developed countries do not amount to much in practice. In Sweden, for example, corporate donations are deductible only when they meet the criteria for a business expense. Under the Swiss federal income tax, individuals may not deduct charitable contributions, although enterprises may do so with few restrictions: the more important cantonal income taxes, which vary widely from canton to canton, usually allow some limited deductibility. In Belgium, corporations may deduct gifts to a limited number of organizations subject to a limit of the lesser of 5 per cent of net income or 10 million francs. Germany has a similar limit of 5 per cent (10 per cent for scientific purposes) or 0.2 per cent of the sum of net payroll and turnover. The limit in France is 0.1 per cent of turnover in France (0.2 per cent for certain certified research institutions).

Finally, in the Netherlands the maximum is 6 per cent of pre-tax profits. In none of these countries do there appear to have been any empirical studies of the effects of taxation on giving.

53. J.A. Johnson, "The Determinants of Charitable Giving with Special Emphasis on the Income Deduction Under the Income Tax - A Survey of the Empirical Literature", Working Paper No. 82-29, Department of Economics, McMaster University, August 1982.

54. See Charles T. Clotfelter, "Tax Incentives and Charitable Giving: Evidence from a Panel of Taxpayers", Journal of Public Economics, 13 (1980), 335.

55. R.D. Hood, S.A. Martin, and L.S. Osberg, "Economic Determinants of Individual Charitable Donations in Canada", Canadian Journal of Economics, 10 (Nov. 1977), 653-69.

56. The figures were 2.2 (price) and 1.2 (income) for educational giving and 0.5 (price) and 0.6 (income) for religious giving: Martin Feldstein, "The Income Tax and Charitable Contributions: Part II - The Impact on Religious, Educational, and other Organizations", National Tax Journal, 28 (June 1973), 217. These income elasticity findings were confirmed, but the price elasticity results were contradicted, in a later study by William Reece, "Charitable Contributions: New Evidence on Household Behaviour", American Economic Review, 69 (March 1979), 148.

57. See the references in note 36 above.

58. This account is based on a brief summary of the study (by Rudney, Dennis, and Wyscarver) in Giving U.S.A. 1983, p. 16 and on a telephone conversation with the principal author. (Unfortunately, the study itself was not available in time to permit a more precise citation.) Another recent study that has as yet only been seen in summary form is by Charles T. Clotfelter, Tax Policy and Charitable Giving (University of Chicago Press, forthcoming): as summarized in NBER Reporter (Summar 1984), pp. 8-10, stresses the consistency of empirical results (such as those shown in Table 11) on individual giving and finds similar, smaller, price and income effects for corporate giving.

59. See Robert Sugden, "On the Economics of Philanthropy", Economic Journal, 92 (June 1982), 341-50; also David A. Collard, "Economics of Philanthropy: A Comment", Economic Journal, 93 (Sept. 1983), 637-38. (There is of course an extensive literature on the economics of philanthropy and of public subsidies to private charity which is not further discussed here.)

60. Sugden, op. cit., p. 350.

61. Earl F. Cheit and Theodore E. Lobman III, "Private Philanthropy and Higher Education: History, Current Impact, and Public Policy Considerations," in Research Papers Sponsored by the Commission on Private Philanthropy and Public Needs (Washington: Department of the Treasury, 1977), Vol. II, p. 503.

62. Ibid., pp. 492-94. This study also lists five other functions which seem less relevant to Ontario.

63. "Report of the Presidential Advisory Committee on Institutional Strategy" (University of Toronto, June 1983), pp. 4-5.

64. Salem Alaton, "Drumming-up Donors", Globe and Mail, May 5, 1984.

65. At the University of Toronto, for example, one of the "reforms" of the late 1960s was that address records were no longer kept of students' parents, with the result that Toronto has not been able to mount a campaign at this obvious target group (unlike, for example, Queen's). Similarly, Toronto has long had a policy of accepting only "fully funded" professorial chairs and buildings. The Committee cited in note 63 recommended that "...donors should be informed that their names can be attached to professorships, wings or rooms in buildings, specific laboratories and specific library collections, by making gifts of substantial but smaller size" (pp. 5-6). Western Ontario has apparently gone much further in this direction in its latest campaign in which alumni are reportedly being asked to give money for such items as "medicine chests and wastebaskets to go into a new residence" (University of Toronto Bulletin, June 25, 1984, p. 2). The article does not make it clear whether a donor may, if he or she chooses, get his or her name inscribed on the wastebasket - but why not? Seats in university lecture theatres, like those in Roy Thomson Hall - hardly fully funded by the family whose name it bears! - can bear name plates of donors and still serve their prime function without hindrance. So can wastebaskets, medicine chests, elevators, laboratory equipment, and indeed almost any item in a university setting.

66. Three portmanteau quotations from officials of public colleges may capture the flavour of some of the current U.S. literature: (1) "Fundraising is like milking a cow the old-fashioned way... You have to sit down beside them and go to work... The president spends one-third of his time working on development." (2) "The [college] foundation's board of directors have no faculty members or students. This is not a collegial organization...forget about blacks, indians, women, and mothers. The board has nothing to do with affirmative action... Your business is fundraising." (3) "We used to

have a lot of good old boys and good old girls who loved to be trustees and come to meetings, but they never did a bit of good for the college...you need the best banker, the best attorney, the best major retailer, and the best physician" on the board. (All quotes from The Chronicle of Higher Education, 28 (April 18, 1984, p. 14). No doubt this sort of thing is too hard-nosed, harsh, and unacademic for Ontario universities, but it does perhaps serve to make the point.

67. See text at note 2 above.

68. Partnership for Growth: Corporate-University Cooperation in Canada (Montreal: Corporate-Higher Education Forum, May 1984).

69. An interesting historical perspective is provided in James B. MacAulay and Paul Dufour, The Machine in the Garden: The advent of Industrial Research Infrastructure in the Academic Milieu (Ottawa: Science Council of Canada, 1984).

70. Other countries seem busy fighting older battles, as witness two recent headlines in the education press: "Australia's Universities Vulnerable to Federal Control", University Affairs, March 1982, p. 7; and "British Academics Accuse Grants Panel of serving as Agent of Government", Chronicle of Higher Education 28 (March 21, 1984), 25-26.

71. Partnership for Growth, op. cit., p. 1.

72. David, "Supporting Research with a Commercial Mission", p. 17.

73. Walter F. Light, "Brain Power: Our Neglected Resource", University of Toronto Bulletin, July 23, 1984, p. 12.

74. This aspect is stressed by Patrick Phillips, "Trends in Private Support", University Affairs, Oct. 1982, p. 16. Some companies, of course, also provide financial support to the student dependents of employees - usually conditional on their maintaining a satisfactory performance level. Some 400 corporations in Canada also match the gifts of their employees to universities: this may not be quite "A license to print money": as one article called it (Dalhousie Alumni News, Winter/Spring 1984, p. 24), but it is certainly a reason for universities to target especially those alumni whose companies have such programs as indeed most universities already appear to do. While undoubtedly still more could be done to publicize this program by universities and companies alike - the otherwise exhaustive manual on employee benefits distributed by IBM Canada, for example, fails to mention that they have such a program - it really falls under the heading of corporate philanthropy and is not further discussed here.

75. Partnership for Growth, op. cit., p. 66, for instance, mentions a case where a university refused "an appeal by a group of 30 chemical engineers for a post-graduate course "because no funding was available". It is not made clear, however, whether the engineers, or their employers, were given the option of paying for the full cost of providing the desired course.

76. Nine such fellows received the grand total of $107,000 in 1982-83! (MacAulay and Dufour, p. 40.)

77. See Partnership for growth, pp. 60-63, for a favourable assessment of the cooperative program (under certain conditions) from both a business and a university perspective. The major problem noted, quite correctly, in this account is that government funding does not adequately cover the full cost of running such programs (p. 62). Again, however, it is not exactly made clear why it is government (taxpayers in general) who should appropriately bear these costs rather than the direct beneficiaries - the students who earn income and have better job prospects and the companies that receive services and get a leg up on hiring good graduates.

78. The company is Sciex Inc., which now has almost 100 employees. Although the original partners sold this company to MDS Health Group Ltd. in 1981 largely in order to raise capital, the university still owns the basic patents to the "sniffer" produced by this company. However, as a recent Toronto Star (July 26, 1984) story noted, "...even though the university owns the rights to the sniffer's technology, it can't afford to buy one"! Both on its face and after deeper thought, this statement seems unbelievable, if true. Surely both company and university would gain if the former had the benefit of more and different work with and on its equipment and the latter had access to more up-to-date technology.

79. MacAulay and Dufour, p. 72.

80. The second reason is in part based loosely on ibid., pp. 62-65.

81. Partnership for Growth, p. 70.

82. Ibid., pp. 28-29, 39-40. (The Great Lakes Institute, which has no corporate partners listed, has been omitted from this list.)

83. See, for example, the recent establishment of a Centre for Nuclear Engineering at the University of Toronto (University Affairs, March 1984, p. 6).

84. There are as many difficulties in working with data on "research" as with any of the other data sets discussed in

the present paper. It is almost impossible, for example, to reconcile these numbers with those found in the education statistics used earlier. The publication cited in Table 13 should be consulted for many useful qualifications and cautions to the figures in the table, although it should perhaps be noted that the precise method used to estimate the university contribution to university-performed research is not revealed there.

As an illustration of the pitfalls awaiting the careless user of statistics, the Commission's publication on Background Data (June 1984), p. 15, shows $252 million in "sponsored research" in Ontario universities in 1981 or 42 per cent of the Canadian total of $604 million. From Statistics Canada, Canadian Science Indicators 1983, p. 18, however, it may be estimated that Ontario universities performed only $287 million (or 35 per cent) of total university-performed R and D (i.e., research in natural and health sciences only) of $828 million in 1981. In addition, the same source (pp. 29-30) shows that in total university research in Canada in 1981 was $1,138 million (no regional breakdown is provided), of which 52 per cent, or $654 million was funded directly out of university funds, with the balance of $484 million coming from outside sources, including $70 million from private sources ($57 million from "private non-profit", $4 million from business enterprises, and $9 million from foreign): compare Table 8 above, which shows that universities received $93 million in sponsored research revenues from private sources in 1980/81.

85. Of course, as every newspaper reader presumably knows, direct business expenditure on R and D in Canada is still low in relative international terms, although the significance of this oft-reported fact is far from clear.

86. Statistics Canada, Canadian Science Indicators 1983, pp. 28-29. This source is a bit baffling because it also refers on the same page to estimating R and D based on the amount of time spent by university staff. Unfortunately, we were unable to find out exactly how the published estimates were produced since the publication cited in the reference was not available and time did not permit further investigation of this puzzle.

87. As a matter of passing interest, ibid., p. 22, rather casually attributes $150 million of the $376 million of University-financed R and D in 1982 to the federal government when discussing federal support for research - but fails to mention the other $226 million as a provincial contribution when discussing the role of the provincial governments in Canada's research picture! (No basis is given for this split in any case.)

88. The Department of Finance has estimated that of total government-supported R & D, amounting to about $445 million in 1982, $240 million was in direct grants and $205 million was the value of R & D tax allowances (Hon. Marc Lalonde, Research and Development Tax Policies, a Paper for Consultation, Department of Finance, Apr. 1983, 5). The present discussion will not detail the new tax incentives proposed in that paper and since enacted (the Share Purchase Tax Credit and the Scientific Research Tax Credit). The recent changes have probably tilted the balance of division of total government expenditures more toward the tax instrument side than was the case in 1982.

89. Regulation 2900 defines eligible and non-eligible spending activities. Market and promotional research, routine quality testing and product improvement, and style changes are excluded. Research in the social sciences or the humanities is also excluded in keeping with the apparent usual distaste for such "soft" research by all but universities themselves. How the obvious "hard science" bias of government policy may be reconciled with statements such as that by Walter Light quoted at the beginning of this chapter is a question not easily answered. In this connection, it is perhaps worth noting that the standard OECD definition of R and D includes "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications" (as quoted in Canadian Science Indicators 1983, p. 15 - although this publication itself uses "R and D" almost throughout for research in natural science and engineering work only).

90. A careful international comparison suggested that Canada's generosity in this respect was exceeded only by Singapore: see D.G. McFetridge and J.P. Warda, Canadian R and D Incentives (Toronto: Canadian Tax Foundation, 1983).

91. Two devices may be used to "flow" the tax benefits from the spending firm to others: the Share Purchase Tax Credit (sec. 127.2 of the Income Tax Act) and the Scientific Research Tax Credit (sec. 127.3). For details see P.M. Farwell and D.B. Turner, "The New Tax Rules for Investors in Research and Development Companies", Canadian Tax Journal, 32 (Jan.-Feb. 1984), 121-136. We will not elaborate further because, as there noted (125), these devices are not of direct use to universities or other non-taxable organizations in respect to the R & D they themselves finance. Of course, this means in a sense that these measures constitute a government boost, in relative and absolute terms, to non-university research.

92. Renate Lerch, "Report Tells Ottawa to Rely on Market for High-Tech Stimulus", Financial Post, July 28, 1984, p. 23.

93. The Ontario government, of course, has already announced both a $10 million dollar annual program for three years, to "match" private research money (at the rate of 50 cents to the private dollar), as well as its intention to establish "innovation centres" in universities (see Hon. Larry Grossman, Ontario Budget 1984 (May 15, 1984), pp. 7, 10.) Although these amounts are not large, a $20 million dollar a year increase in corporate-sponsored university research in Ontario (as would be needed to get the full $10 million in matching grants) would apparently require something like a ten-fold increase in the amount of such research now taking place directly in Ontario universities!

94. For an eloquent, convincing, and in our experience quite accurate, account of the present situation, see James A. McPherson, "How Universities Sell Themselves Short", Canadian Research, 16 (Oct. 1983), 27-29. All we would alter in McPherson's paper is to attribute somewhat more of the responsibility for the present mess to government policies - without, however, in any way diminishing his plea for university administrations to realize what is going on and to do something about it.

95. Ibid., p. 29.

96. Partnership for Growth, p. 70.

97. Ibid., pp. 78, 88.

98. Ibid., p. 69.

99. Business Week, July 9, 1984, p. 90. The reference is to the development of university-based research parks.

100. Lynn E. Brown, "Can High Tech save the Great Lakes States?" New England Economic Review, Nov./Dec. 1983, pp. 19-35.

101. Federal task force on technology development as quoted in Lerch, op. cit., p. 23.

102. For a vivid example, admittedly from a particular perspective, of the sorts of problems that may emerge within a university owing to reliance on private support to shape the research effort, see D.H. Osmond, "Should U of T become a 'Hospiversity'?", University of Toronto Bulletin, April 23, 1984, p. 14. As a recent controversy at McGill University demonstrates, there are also possible problems of conflict of interest and the like that must be dealt with: see Stephen Strauss, "Guidelines are needed over ties between professors, companies", Globe and Mail, May 7, 1984, p. M7.

103. Partnership for Growth, p. 82.

104. The Report of the Committee on the Future Role of Universities in Ontario (Ministry of Colleges and Universities, 1981), p. 25.